

## ORDER FOR SUPPLIES OR SERVICES

PAGE OF PAGES

1

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IMPORTANT: Mark all packages and papers with contract and/or order numbers.

1. DATE OF ORDER 04/08/2021		2. CONTRACT NO. (If any) 68HERC21D0006		6. SHIP TO: a. NAME OF CONSIGNEE CAD	
3. ORDER NO. 68HERC21F0168		4. REQUISITION/REFERENCE NO. PR-OW-21-00155		b. STREET ADDRESS US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: W136	
5. ISSUING OFFICE (Address correspondence to) CAD US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: W136 Cincinnati OH 45268-0001		c. CITY Cincinnati		d. STATE OH	e. ZIP CODE 45268-0001
7. TO: JING HOFFMANN		f. SHIP VIA			
a. NAME OF CONTRACTOR Cadmus Group LLC, The		8. TYPE OF ORDER			
b. COMPANY NAME		<input type="checkbox"/> a. PURCHASE REFERENCE YOUR:		<input checked="" type="checkbox"/> b. DELIVERY	
c. STREET ADDRESS 100 5TH AVENUE SUITE 100		Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheet, if any, including delivery as indicated.		Except for billing instructions on the reverse, this delivery order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above-numbered contract.	
d. CITY WALTHAM		e. STATE MA	f. ZIP CODE 024518727		
9. ACCOUNTING AND APPROPRIATION DATA See Schedule		10. REQUISITIONING OFFICE Standards & Risk Management Div.			

11. BUSINESS CLASSIFICATION (Check appropriate box(es)) <input type="checkbox"/> a. SMALL <input checked="" type="checkbox"/> b. OTHER THAN SMALL <input type="checkbox"/> c. DISADVANTAGED <input type="checkbox"/> d. WOMEN-OWNED <input type="checkbox"/> e. HUBZone <input type="checkbox"/> f. SERVICE-DISABLED VETERAN-OWNED <input type="checkbox"/> g. WOMEN-OWNED SMALL BUSINESS (WOSB) ELIGIBLE UNDER THE WOSB PROGRAM <input type="checkbox"/> h. EDWOSB				12. F.O.B. POINT	
13. PLACE OF a. INSPECTION Destination		b. ACCEPTANCE Destination		14. GOVERNMENT B/L NO.	
				15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date) Multiple	
				16. DISCOUNT TERMS	

## 17. SCHEDULE (See reverse for Rejections)

ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	DUNS Number: 101163731 TOCOR: JINI MOHANTY  Continued ...					

SEE BILLING INSTRUCTIONS ON REVERSE	18. SHIPPING POINT		19. GROSS SHIPPING WEIGHT		20. INVOICE NO.		17(h) TOTAL (Cont. pages)
	21. MAIL INVOICE TO:						
	a. NAME RTP Finance Center						\$32,284.00
	b. STREET ADDRESS (or P.O. Box) US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts						\$150,137.00
c. CITY Durham			d. STATE NC	e. ZIP CODE 27711		17(i) GRAND TOTAL	

22. UNITED STATES OF

AMERICA BY (Signature)

04/08/2021

23. NAME (Typed)

Keith Pfeffer

TITLE: CONTRACTING/ORDERING OFFICER

## ORDER FOR SUPPLIES OR SERVICES

PAGE NO

## SCHEDULE - CONTINUATION

2

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER		CONTRACT NO.		ORDER NO.		
04/08/2021		68HERC21D0006		68HERC21F0168		
ITEM NO.	SUPPLIES/SERVICES	QUANTITY ORDERED	UNIT	UNIT PRICE	AMOUNT	QUANTITY ACCEPTED
(a)	(b)	(c)	(d)	(e)	(f)	(g)
0001	<p>Admin Office: CAD US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: W136 Cincinnati OH 45268-0001 Period of Performance: 04/08/2021 to 02/28/2022</p> <p>Base Period - Support for SYR4 analyses and CCL 5 development of support documents, supporting public comment response, and stakeholder meetings</p> <p>**Initial funding of \$100,000 for Task Order line item 0001 is allocated from the base contract 68HERC21D0006 on line 20-21-B-40DA-000B53-2505-2040SRE036-001.</p> <p>Program Office tracking:</p> <p>Line 31 SRE025 shows \$346,630.00 of which \$100,000 is to be used on this Task Order per PR-OW-21-00155</p> <p>Delivery: 02/28/2022 Accounting Info: 20-21-B-40DA-000B53-2505 BFY: 20 EFY: 21 Fund: B Budget Org: 40DA Program (PRC): 000B53 Budget (BOC): 2505 Funding Flag: Complete Funded: \$0.00</p>					
0002	<p>Option Period 1 (Option Line Item) 12/15/2021</p> <p>Delivery: 09/30/2022</p>				32,284.00	

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$32,284.00

**Performance Work Statement  
Contract 68HERC21D0006  
Task Order Tracking Number: PR-OW-21-00155**

- I. Title: Support for Six-Year Review 4 and Development of CCL 5 Microbes**
- II. Estimated Period of Performance:** See Task Order period of performance clause
- III. Key EPA Personnel:**

**Task Order Contracting Officer's Representative and Technical Expert (TOCOR):**

Name: Pritidhara (Jini) Mohanty  
Office: OW/OGWDW  
Standards and Risk Management Division  
Address: US EPA, 1200 Pennsylvania Ave, NW (4607M)  
Washington, DC 20460  
Location: 2209S  
Telephone #: 202-564-5269  
Email: mohanty.jini@epa.gov

**Alternate Task Order Contracting Officer's Representative and Technical Expert (ALT-TOCOR):**

Name: Hannah Holsinger  
Office: OW/OGWDW  
Standards and Risk Management Division  
Address: US EPA, 1200 Pennsylvania Ave, NW (4607M)  
Washington, DC 20460  
Location: 2209W  
Telephone #: 202-564--0403  
Email: holsinger.hannah@epa.gov

**IV. BACKGROUND AND PURPOSE**

The 1996 Amendments to the Safe Drinking Water Act (SDWA) requires the U.S. Environmental Protection Agency (EPA) to review its existing drinking water regulations every six years. Section 1412(b)(9) of the SDWA states "The administrator shall, not less often than every 6 years, review and revise, as appropriate, each national primary drinking water regulation (NPDWR) promulgated under this title. Any revision of a national primary drinking water regulation shall be promulgated in accordance with this section, except that each revision shall maintain, or provide for greater, protection of the health of persons."

Since the 1996 SDWA Amendments were enacted, EPA has completed three comprehensive reviews of existing NPDWRs: Six-Year Review 1 (completed in July 2003), Six-Year Review 2 (completed in March 2010) and Six-Year Review 3 (completed in December 2016). EPA is

currently in its fourth Six-Year Review process (SYR 4).

As part of the SYR process, EPA assesses and analyzes new data/information regarding health effects, occurrence, treatment, and analytical methods to evaluate whether there are new or additional ways to estimate and manage risk that will maintain or strengthen public health protection. Potential outputs from the SYR 4 review will include summary documents on health effects, occurrence, treatment, and implementation, as well as other documents to support the SYR decision-making.

Compliance monitoring data and treatment technique information are key components in the SYR process. Through the Information Collection Request (ICR) process, the Agency facilitates data sharing from States in order to obtain comprehensive nationally representative occurrence data. As was done with previous Six-Year Review, EPA requested voluntary submission of its compliance monitoring data and treatment technique information for all regulated chemical, radiological, and microbiological contaminants. The Office of Management and Budget (OMB) approved the ICR for the EPA's fourth Six-Year Review under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 et seq., and assigned the OMB control number 2040-0298.

Following data collection and quality assurance procedures, EPA will conduct an occurrence analysis using data obtained from states through the ICR. The result of this effort will provide EPA with up-to-date data to form a statistically valid sample of regulated contaminant occurrence in water supply systems throughout the nation. EPA follows a protocol for Six-Year Review. The protocol can guide analysis and includes a regulatory review decision tree contains branches with a series of sequential questions that inform a decision about the appropriateness of revising an NPDWR.

Under this task order, EPA is seeking support for its effort pertaining to the microbial rules that EPA expects to review for SYR 4. The SYR 4 will assess new data/information related to microbial contaminants regulated under the Revised Total Coliform Rule (RTCR), Long Term 2 Enhanced Surface Water Treatment Rule (LT2), Groundwater Rule (GWR), and Aircraft Drinking Water Rule (ADWR). EPA anticipates completing the SYR 4 in early 2023.

The 1996 SDWA Amendments also require EPA to publish a list of contaminants that are known or anticipated to occur in public water systems, and which may require regulation under the SDWA, known as the Drinking Water Contaminant Candidate List, or CCL. (Section 1412(b)(1)). The drinking water CCL is a list of contaminants that are currently not subject to any proposed or promulgated NPDWRs but are known or anticipated to occur in public water systems. Contaminants listed on the CCL may require future regulation under the SDWA. The SDWA directs the Agency to consider the health effects and occurrence information for unregulated contaminants as the Agency makes decisions to place contaminants on the list. SDWA further specifies that the Agency place those contaminants on the list that present the greatest public health concern related to exposure from drinking water. EPA uses the CCL to identify priority contaminants for regulatory decision making and information collection. EPA is currently developing the draft CCL 5. EPA anticipates to complete CCL 5 in 2022.

Under this task order, the contractor shall support EPA's effort to evaluate the existing NPDWRs for effectiveness of public health protection through the Six Year Review process. In addition,

this task order shall support EPA in continuing the process of developing a draft and final microbial candidate contaminant list for EPA's CCL process.

## **V. TASKS**

The tasks below provide the contractor with a description of the expected deliverables and time frames.

### **Task 1. Monthly progress reports and administration**

Reports of Work, the contractor shall provide electronic copies of the monthly progress and financial reports to the Contracting Officer, EPA Contract Level COR (CLCOR) (previously titled Project Officer (PO)) and TOCOR. Each progress report shall describe the technical work and expenditures for the same time period as the corresponding invoice. The reports shall list by task the amount of work completed and include a table of hours by personnel for each task. The reports also shall identify any problems or difficulties, lessons learned, Quality Assurance (QA)/Quality Control (QC) activities, and next steps.

Within ten (10) days of task order award, the contractor shall schedule a conference call with the TOCOR to clarify outstanding questions and confirm the schedule and specific tasks. The contractor shall provide status updates to the TOCOR by conference call periodically (approximately biweekly or more frequently if necessary) to discuss progress, challenges, and decisions regarding next steps.

The contractor shall immediately notify the EPA TOCOR by telephone of any problems that may impede performance, impact QA-related activities, and any corrective actions needed to solve the problems. The contractor shall also include this in the Monthly Technical and Cost Progress Reports.

**Deliverables and schedule under Task 1:** The contractor shall provide monthly progress and financial reports and periodic calls with the EPA.

#### **Deliverables and schedule under Task 1**

<b>Task</b>	<b>Deliverable</b>	<b>Due</b>
1	Progress and financial reports	Monthly after receiving TO award
	Calls with EPA	Bi-weekly after receiving TO award including weekly calls during periods of significant activity

### **Task 2. Quality assurance/quality control**

Quality Assurance is an important component of EPA's work to assure that environmental information is appropriate for its intended use. This Task Order (TO) does not require the contractor to collect or obtain field samples. Tasks 4 will require the contractor the use of secondary data. Therefore, consistent with the Agency's quality assurance (QA) requirements, the contractor shall develop a project-specific quality assurance project plan (PQAPP) to assure that sound quality of the secondary data is used for these tasks. In addition, throughout the course of this call order, if it is determined the PQAPP requires revision, the contractor will provide

necessary changes to the TOCOR.

**Deliverables and schedule under Task 2:** The contractor shall provide a PQAPP describing the use of secondary environmental data management within two weeks of award, and a revised PQAPP (if needed) within one week of receiving written comments from the TOCOR.

**Deliverables and schedule under Task 2**

<b>Task</b>	<b>Deliverables</b>	<b>Due</b>
2a	Draft PQAPP	Within 2 weeks of TO award
2b	Revised PQAPP (if needed)	Within 2 weeks of receiving comments from TOCOR

**Task 3: Six-Year Review 4 Support**

The compliance monitoring and treatment techniques records collected under the SYR 4 ICR provide the data needed to conduct statistical estimates of national occurrence for regulated contaminants and to evaluate treatment technique information associated with the control of pathogens, disinfectants, and disinfection byproducts. The national occurrence estimates and information on treatment techniques will support the SDWA mandate that requires the EPA to review the existing NPDWRs and determine whether revisions are appropriate.

The contractor shall support EPA with occurrence analyses, reports, and support documents on microbial occurrence data using the SYR 4 ICR compliance monitoring and treatment technique data, as well as other supplemental occurrence data sources.

After consulting with the TOCOR, the contractor shall execute the following tasks:

- Task 3a. Review EPA's draft preliminary data analysis plan, suggest improvements that support analysis objectives, and modify the plan, as appropriate.
- Task 3b. Conduct, record, and report occurrence analyses of the microbial data to support the review of the Revised Total Coliform Rule (RTCR), Ground water Rule (GWR), Long-term 2 Enhanced Surface Water Treatment Rule (LT2), and the Aircraft Drinking Water Rule (ADWR). Currently anticipated analyses are described as: Derive and report detailed estimates of national occurrence of these microbial contaminants. Analysis will consist of: positive counts of Total Coliform (TC), *E. coli* (EC), fecal coliforms, Coliphage, *Enterococci*, *Cryptosporidium*, recorded by raw or finished water sample, source water type (ground water or surface water), system type (community water system, transient non-community water systems, and non-transient non-community water systems), chlorine or chloramines and system size (less than 100, 101-200, 501-1,000, 1001-4100, 4101-33,000, 33,001-100,000, more than 100,000) from the SYR 4 ICR dataset for data collected in years 2012-2019). Conduct similar analyses for TC, EC and other data provided by EPA from ADWR. Analyses are not limited to those described in this task to support decision making under SYR4. Further analyses will be described in the data analysis plan described in Task 3a and by TOCOR. Past occurrence analyses for regulated microbial contaminants can be found in the EPA SYR 3 support document ["Six-Year Review 3 Technical Support Document for Microbial Contaminant](#)

Regulations.”

- Task 3c. Conduct a literature review on health effects and treatment (e.g., evaluating the efficacy of Treatment Technique on disinfecting microbials).
- Task 3d. Based on the results of Tasks 3a to 3c, develop a draft of updated (from Six-Year Review 3) technical support document “*Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations*” anticipated to include:
  - History of microbial regulations
  - Health effects
  - Occurrence and exposure
  - Treatment
  - References

Begin the final draft after receiving EPA comments/edits.

- Task 3e. While the review, editing, and formatting of the states database will have been substantially completed previously, additional contractor support may be necessary as discovered during data analysis effort. For example, errors may be detected in the database or updated information could be received from a state or other entity, requiring additional work in the database.

**Deliverables and schedule under Task 3**

<b>Task</b>	<b>Deliverables</b>	<b>Due Date</b>
3a	Provide suggestions to EPA Data Analysis Plan	Within 2 weeks of PQAPP approval unless TOCOR agrees to a later date
	Revise Data Analysis Plan (if needed)	Within 5 weeks of PQAPP unless TOCOR agrees to a later date
3b	Draft Data Analysis	September 8, 2021 unless TOCOR agrees to a later date
	Final Data Analysis	Within 1 month after comments are provided by the TOCOR on any revisions.
3c	Literature review on health effects and treatment	October 15, 2021 unless TOCOR agrees to a later date
3d	Revised draft Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations.	January 31, 2022 unless TOCOR agrees to a later date
3e	Add documentation to Quality Assurance and Data Management document	As needed

**Task 4. Microbial Contaminant Candidate List 5**

After consulting with the TOCOR, the contractor shall support EPA in compiling and categorizing public comments (regarding the microbial contaminants) associated with Federal Register Notice for the draft CCL 5 and finalizing the CCL 5 Microbial Support document by

addressing comments and revisions requested in the support document from EPA management review, Science Advisory Board comments, and a public comment period. The comments are expected to be of a scientific and technical nature related to microbial health effects and occurrence. The final CCL Microbial Support document, with the revisions included and comments addressed, shall not exceed 300 pages in total (the current draft is approximately 226 pages). The contractor shall update or revise any additional supporting files as needed including if the comments received require it (e.g., Excel spreadsheets, Contaminant Information Sheets (CIS), Microsoft word documents) and support development of a comment response document. EPA estimates up to 8-10 additional support materials may need revision (most needing no more than 5 pages each, with the comment response support estimated 20 pages dependent upon the amount of comments received).

**Deliverables:** The contractor shall provide draft and final clean and track changes versions of the CCL 5 Microbial Support Document of an estimated 260-300 pages, plus an estimated 8-10 supporting files.

#### Deliverables and schedule under Task 4

Task	Deliverable	Due Date
4a	Support for response to comments from FRN draft CCL 5	Within 1 month of comments received
4b	Draft support documents and supporting files	Within two months of the TO award
	Final support documents and supporting files	Within 1 month after comments are provided by the TOCOR on revised draft support document.

#### Option Period 1

#### Task 5

Based on the results of Tasks 3a to 3d, develop a final updated (from Six-Year Review 3) technical support document “*Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations*” to include:

- History of microbial regulations
- Health effects
- Occurrence and exposure
- Treatment
- References

#### Deliverables and schedule under Task 5

Task	Deliverable	Due Date
5	Final Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations.	Within 1 month after comments are provided by the TOCOR on revised draft support document.

## Task 6

Based on the results of Task 4, complete any remaining support materials as needed for CCL 5.

### Deliverables and schedule under Task 5

Task	Deliverable	Due Date
6	Finalize remaining support documents and supporting files.	Within 1 month after comments are provided by the TOCOR on revised draft support document and supporting files.

## VI. General Requirements of the Task Order and Schedule

Work conducted under this Task Order shall not duplicate work conducted under any other Task Order or Work Assignment under any other contract.

Confidential Business Information (CBI): For this Task Order, the contractor shall not be accessing any Confidential Business Information (CBI).

Identification as Contracting Staff: To avoid the perception that contractor personnel are EPA employees, the contractor personnel shall be clearly identified as independent contractors of EPA when participating in events with outside parties and prior to the start of any meeting. The contractor personnel are prohibited from acting as the Agency's official representative. When speaking with the public, the contractor shall refer all interpretations of policy to the TOCOR.

Limitation of Contractor Activities: The contractor shall submit drafts of all deliverables to the TOCOR for review prior to submission of the final product. These drafts will clearly specify the methods, procedures, considerations, assumptions, relevant citations, data sources and data that support any conclusions and recommendations. The contractor shall incorporate all TOCOR and EPA team member comments into all final deliverables, unless otherwise agreed upon by the TOCOR or where discrepancies exist. The contractor shall adhere to all applicable EPA management control procedures as implemented by the EPA Contracting Officer (CO), Project Officer (PO), and TOCOR.

Quick Response: Under this Performance Work Statement (PWS), the contractor may be required to provide information for use by EPA for quick responses and analyses of options, issues, and policy decisions. Quick responses are those which require completion in one to five working days.

Travel: Travel is not anticipated under this Performance Work Statement (PWS).

Deliverable Formatting: All memos, draft comments, summaries and responses, chapters, and presentations are to be provided in electronic form using Word and/or Excel/Access, Power Point, or, in special cases another software program agreed to by the TOCOR. Memos are to be written in a manner which will make them easy to conform into draft chapters for the Final Report. For deliverables that are in Word or pdf versions of Word documents, that are intended

to be shared with management or the public, the contractor shall use decimal align in all tables containing columns of numbers of varying digits, whether decimal places are reported or not. All final materials, e.g., memos, chapters, etc. are to be compliant with Section 508 Amendment to the Rehabilitation Act of 1973.

## VII. BASE PERIOD DELIVERABLES

All deliverables shall be in accordance with the contract level PWS, Section F.

Task	Deliverables	Due
1	Progress and financial reports	Monthly
	Calls with EPA	Bi-weekly, weekly calls during periods of intense activity
2	Draft and Revised PQAPP	Within 2 weeks of TO award for the draft and within 2 weeks of receiving written comments from the TOCOR for the revised PQAPP.
3a	Provide suggestions to EPA Data Analysis Plan and Revised Data Analysis Plan (if needed)	Within 2 weeks of PQAPP approval unless TOCOR agrees to a later date and within 5 weeks of PQAPP unless TOCOR agrees to a later date
3b	Draft Data Analysis	September 8, 2021 unless TOCOR agrees to a later date
	Final Data Analysis	Within 1 month after comments are provided by the TOCOR on any revisions.
3c	Literature review on health effects and treatment	October 15, 2021 unless TOCOR agrees to a later date
3d	Revised draft Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations.	January 31, 2022 unless TOCOR agrees to a later date
3e	Updating Quality Assurance and Data Management document	As needed
4a	Support for response to comments received from FRN draft CCL 5	Within 1 month after comments are received
4b	Draft support documents and supporting files	Within two months of the TO award
	Final support documents and supporting files	Within 1 month after comments are provided by the TOCOR on revised draft support document.

## VIII. OPTION 1 PERIOD DELIVERABLES

<b>Task</b>	<b>Deliverable</b>	<b>Due Date</b>
5	Final Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations.	Within 1 month after comments are provided by the TOCOR on revised draft support document.
6	Final additional support documents and supporting files for CCL 5.	Within 1 month after comments are provided by the TOCOR on draft documents and supporting files.

## **SECTION B - Supplies or Services/Prices**

### **B-1 Local Clauses EPA-B-32-103 LIMITATION OF GOVERNMENT'S OBLIGATION**

(a) Severable services may be incrementally funded. Non-severable services shall not be incrementally funded. Contract line item 0001 is severable and may be incrementally funded. For this item, the sum of \$100,000.00 of the total price is presently available for payment and allotted to this item.

(b) For items identified in paragraph (a) of this clause, the Contractor agrees to perform up to the point at which the total amount payable by the Government, including reimbursement in the event of termination of those items for the Government's convenience, approximates the total amount currently allotted for those items to the contract. The Contractor shall not continue work on those items beyond that point. Subject to the clause entitled "Termination for Convenience of the Government," the Government will not be obligated, under any circumstances, to reimburse the Contractor in excess of the amount payable by the Government in the event of the termination of applicable contract line items for convenience including costs, profit, and estimated termination costs for those line items.

(c) Notwithstanding the dates specified in the allotment schedule in paragraph (h) of this clause, the Contractor will notify the Contracting Officer, in writing, at least 10 days prior to the date when, in the Contractor's best judgment, the work will reach the point at which the total amount payable by the Government, including any cost for termination for convenience, will approximate 85 percent of the total amount currently allotted to the contract for performance of the applicable items. The notification will state (1) the estimated date when that point will be reached and (2) an estimate of additional funding, if any, needed to continue performance of the applicable line items up to the next scheduled date for the allotment of funds identified in paragraph (a) of this clause, or to a substitute date as determined by the Government pursuant to paragraph (d) of this clause. If, after such notification, additional funds are not allotted by the date identified in the Contractor's notification, or by an agreed substitute date, the Contracting Officer will terminate any item(s) for which additional funds have not been allotted, pursuant to the clause entitled "Termination for Convenience of the Government."

(d) The parties contemplate that, subject to the availability of appropriations, the Government may allot additional funds for continued performance of the contract line items identified in paragraph (a) of this clause and will determine the estimated period of contract performance which will be covered by the funds. If additional funds are allotted, the Contracting Officer will notify the Contractor in writing. The Contractor shall not resume performance of the contract line items identified in paragraph (a) until the written notice is received. The provisions of paragraphs (b) through (d) of this clause will apply in like manner to the additional allotted funds and to the new estimated period of contract performance. The contract will be modified accordingly.

(e) The Government may, at any time prior to termination, allot additional funds for the performance of the contract line items identified in paragraph (a) of this clause.

(f) The termination provisions of this clause do not limit the rights of the Government under the clause entitled "Default". The provisions of this clause are limited to the work and allotment of funds for the contract line items set forth in paragraph (a) of this clause. This clause no longer applies once the contract is fully funded.

(g) Nothing in this clause affects the right of the Government to otherwise terminate this contract pursuant to the contract clause entitled "Termination for Convenience of the Government".

(h) The parties contemplate that the Government may obligate funds to this contract in accordance with the following schedule:

RECAPITULATION:

**RECAPITULATION OF FUNDING TO DATE**  
**CONTRACT NO. 68HERC21D0006**  
**TASK ORDER NO. 68HERC21F0168**

**Base Period of Performance - FROM 04/08/2021 through 02/28/2022**

<b><u>FUNDING ACTION</u></b>	<b><u>FUNDING</u></b>	
<b>Total Line Item 0001 Amount:</b>	\$	150,137
Initial Funding:	\$	100,000
Balance Unfunded	\$	50,137

**SECTION F - Deliveries or Performance**

F-1 Local Clauses EPA-F-12-101 PERIOD OF PERFORMANCE

The period of performance of this Task Order period (Base Period) shall be from 04/08/2021 through 02/28/2022 inclusive of all required reports.

The period of performance of Option Period 1, if exercised, shall be from 03/01/2022 through 09/30/2022 inclusive of all required reports.

**SECTION G - Contract Administration Data**

G-1 Local Clauses EPA-G-42-101 CONTRACT ADMINISTRATION REPRESENTATIVES

Task Order-Level Contracting Officers Representatives (CORs)/Project Officers for this contract are as follows:

George Gardenier, 202-564-1379, email: mohanty.jini@epa.gov (TOCOR)

Hannah Holsinger, 202-564-4901, email: holsinger.hannah@epa.gov (Alternate TOCOR)

Contracting Officials responsible for administering this contract are as follows:

Keith Pfeffer, 513-487-2034, pfeffer.keith@epa.gov (Contracting Officer)

John Krauss, 513-487-2148, krauss.john@epa.gov (Contract Specialist)

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>				1. CONTRACT ID CODE		PAGE OF PAGES	
						1 3	
2. AMENDMENT/MODIFICATION NO.		3. EFFECTIVE DATE		4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO. (If applicable)	
P00001		See Block 16C		PR-OW-21-00347			
6. ISSUED BY		CODE		7. ADMINISTERED BY (If other than Item 6)		CODE	
CAD							
US Environmental Protection Agency							
26 West Martin Luther King Drive							
Mail Code: W136							
Cincinnati OH 45268-0001							
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)				(x)			
Cadmus Group LLC, The							
Attn: JING HOFFMANN							
100 5TH AVENUE							
SUITE 100							
WALTHAM MA 024518727							
				9A. AMENDMENT OF SOLICITATION NO.			
				9B. DATED (SEE ITEM 11)			
				x			
				10A. MODIFICATION OF CONTRACT/ORDER NO.			
				68HERC21D0006			
				68HERC21F0168			
				10B. DATED (SEE ITEM 13)			
				04/08/2021			
CODE 101163731		FACILITY CODE					
<b>11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS</b>							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended. <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or electronic communication which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by letter or electronic communication, provided each letter or electronic communication makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required)				Net Increase:		\$50,137.00	
See Schedule							
<b>13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.</b>							
CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.						
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).						
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:						
X	D. OTHER (Specify type of modification and authority) TO Clause B-1, EPA-B-32-103						
<b>E. IMPORTANT:</b> Contractor <input checked="" type="checkbox"/> is not <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)							
DUNS Number: 101163731							
TOCOR: JINI MOHANTY							
The purpose of this Modification is to:							
(1) Correct EAS funding data errors from the Task Order base award, as further detailed below; and							
(2) Incrementally fund the Task Order base period in the amount of \$50,137.							
Specifically, this Modification clarifies that the Task Order base period of performance shall now be both priced and fully funded at a total value of \$150,137, including \$100,000							
Continued ...							
Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)			
				Keith Pfeffer			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA		16C. DATE SIGNED	
(Signature of person authorized to sign)				 (Signature of Contracting Officer)		04/26/2021	

<b>CONTINUATION SHEET</b>	REFERENCE NO. OF DOCUMENT BEING CONTINUED	PAGE	OF
	68HERC21D0006/68HERC21F0168/P00001	2	3

NAME OF OFFEROR OR CONTRACTOR  
Cadmus Group LLC, The

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>allocated from the base contract at Task Order award (see below accounting citation) and \$50,137 obligated by this Modification (see below accounting citation).</p> <p>See Funding Recap sheet.</p> <p>Except for these changes, all other Task Order terms and conditions remain unchanged.</p> <p>LIST OF CHANGES:</p> <p>New Total Amount for this Version: \$150,137.00</p> <p>Obligated Amount for this Modification: \$50,137.00</p> <p>CHANGES FOR LINE ITEM NUMBER: 1</p> <p>Obligated Amount for this Modification: \$50,137.00</p> <p>CHANGES FOR ACCOUNTING CODE: 20-21-B-40DA-000B53-2505 Amount changed from \$150,137.00 to \$100,000.00 **Initial funds allocated from the Base Contract</p> <p>NEW ACCOUNTING CODE ADDED: Account code: 21-22-B-40DB-000B53-2505-2140SRE014-001 Beginning FiscalYear 21 Ending Fiscal Year 22 Fund (Appropriation) B Budget Organization 40DB Program (PRC) 000B53 Budget (BOC) 2505 Job # (Site/Project) Cost Organization DCN-LineID 2140SRE014-001 Quantity: 0 Amount: \$50,317.00 **ONLY OBLIGATE \$50,137.00 OF THE COMMITTED \$50,317.00 TO THIS TASK ORDER. This account code is over-committed by \$180.00, which will be de-committed at a later date.</p> <p>Continued ...</p>				

NAME OF OFFEROR OR CONTRACTOR  
Cadmus Group LLC, The

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Payment: RTP Finance Center US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts Durham NC 27711 Period of Performance: 04/08/2021 to 02/28/2022				

## **SECTION B - Supplies or Services/Prices**

### **B-1 Local Clauses EPA-B-32-103 LIMITATION OF GOVERNMENT'S OBLIGATION**

(a) Severable services may be incrementally funded. Non-severable services shall not be incrementally funded. Contract line item 0001 is severable and may be incrementally funded. For this item, the sum of \$150,137.00 of the total price is presently available for payment and allotted to this item.

(b) For items identified in paragraph (a) of this clause, the Contractor agrees to perform up to the point at which the total amount payable by the Government, including reimbursement in the event of termination of those items for the Government's convenience, approximates the total amount currently allotted for those items to the contract. The Contractor shall not continue work on those items beyond that point. Subject to the clause entitled "Termination for Convenience of the Government," the Government will not be obligated, under any circumstances, to reimburse the Contractor in excess of the amount payable by the Government in the event of the termination of applicable contract line items for convenience including costs, profit, and estimated termination costs for those line items.

(c) Notwithstanding the dates specified in the allotment schedule in paragraph (h) of this clause, the Contractor will notify the Contracting Officer, in writing, at least 10 days prior to the date when, in the Contractor's best judgment, the work will reach the point at which the total amount payable by the Government, including any cost for termination for convenience, will approximate 85 percent of the total amount currently allotted to the contract for performance of the applicable items. The notification will state (1) the estimated date when that point will be reached and (2) an estimate of additional funding, if any, needed to continue performance of the applicable line items up to the next scheduled date for the allotment of funds identified in paragraph (a) of this clause, or to a substitute date as determined by the Government pursuant to paragraph (d) of this clause. If, after such notification, additional funds are not allotted by the date identified in the Contractor's notification, or by an agreed substitute date, the Contracting Officer will terminate any item(s) for which additional funds have not been allotted, pursuant to the clause entitled "Termination for Convenience of the Government."

(d) The parties contemplate that, subject to the availability of appropriations, the Government may allot additional funds for continued performance of the contract line items identified in paragraph (a) of this clause and will determine the estimated period of contract performance which will be covered by the funds. If additional funds are allotted, the Contracting Officer will notify the Contractor in writing. The Contractor shall not resume performance of the contract line items identified in paragraph (a) until the written notice is received. The provisions of paragraphs (b) through (d) of this clause will apply in like manner to the additional allotted funds and to the new estimated period of contract performance. The contract will be modified accordingly.

(e) The Government may, at any time prior to termination, allot additional funds for the performance of the contract line items identified in paragraph (a) of this clause.

(f) The termination provisions of this clause do not limit the rights of the Government under the clause entitled "Default". The provisions of this clause are limited to the work and allotment of funds for the contract line items set forth in paragraph (a) of this clause. This clause no longer applies once the contract is fully funded.

(g) Nothing in this clause affects the right of the Government to otherwise terminate this contract pursuant to the contract clause entitled "Termination for Convenience of the Government".

(h) The parties contemplate that the Government may obligate funds to this contract in accordance with the following schedule:

RECAPITULATION:

**RECAPITULATION OF FUNDING TO DATE  
CONTRACT NO. 68HERC21D0006  
TASK ORDER NO. 68HERC21F0168**

**Base Period of Performance - FROM 04/08/2021 through 02/28/2022**

<b>FUNDING ACTION</b>	<b>FUNDING</b>
<b>Total Line 0001 Amount</b>	<b>\$150,137</b>
<b>Initial Funding</b>	<b>\$100,000</b>
<b>Incremental Funding (P000001)</b>	<b>\$50,137</b>
<b>Balance Unfunded</b>	<b>\$0.00</b>

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>		1. CONTRACT ID CODE		PAGE OF PAGES 1 2	
2. AMENDMENT/MODIFICATION NO. P00002		3. EFFECTIVE DATE See Block 16C		4. REQUISITION/PURCHASE REQ. NO.	
5. PROJECT NO. (If applicable)		6. ISSUED BY CAD		7. ADMINISTERED BY (If other than Item 6) CODE	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) Cadmus Group LLC, The Attn: JING HOFFMANN 100 5TH AVENUE SUITE 100 WALTHAM MA 024518727		(x)		9A. AMENDMENT OF SOLICITATION NO.	
CODE 101163731		FACILITY CODE		9B. DATED (SEE ITEM 11)	
		x		10A. MODIFICATION OF CONTRACT/ORDER NO. 68HERC21D0006 68HERC21F0168	
				10B. DATED (SEE ITEM 13) 04/08/2021	

**11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended. ☐ is not extended.  
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning \_\_\_\_\_ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or electronic communication which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by letter or electronic communication, provided each letter or electronic communication makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)  
See Schedule

**13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
X	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

**E. IMPORTANT:** Contractor ☒ is not ☐ is required to sign this document and return \_\_\_\_\_ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)  
DUNS Number: 101163731  
TOCOR: NICOLE TUCKER

The purpose of this modification is to change the Primary TOCOR to Nicole Tucker.

As a result of this change, Jini Mohanty is moved FROM Primary TOCOR TO Alternate TOCOR.  
Previous Alternate TOCOR Appointments pursuant to this Task Order remain effective.

All other terms and conditions remain in effect and unchanged at this time.

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Keith Pfeffer	
15B. CONTRACTOR/OFFEROR  (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA  (Signature of Contracting Officer)	16C. DATE SIGNED 05/05/2021

Previous edition unusable

<b>CONTINUATION SHEET</b>	REFERENCE NO. OF DOCUMENT BEING CONTINUED 68HERC21D0006/68HERC21F0168/P00002	PAGE	OF
		2	2

NAME OF OFFEROR OR CONTRACTOR  
Cadmus Group LLC, The

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Payment: RTP Finance Center US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts Durham NC 27711 Period of Performance: 04/08/2021 to 02/28/2022 PRIMARY TOCOR: NICOLE TUCKER ALT-TOCOR: JINI MOHANTY				

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>				1. CONTRACT ID CODE		PAGE OF PAGES	
						1      2	
2. AMENDMENT/MODIFICATION NO.		3. EFFECTIVE DATE		4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO. (If applicable)	
P00003		See Block 16C		PR-OW-21-00676			
6. ISSUED BY		CODE		7. ADMINISTERED BY (If other than Item 6)		CODE	
CAD							
US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: W136 Cincinnati OH 45268-0001							
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)				(x)			
Cadmus Group LLC, The Attn: JING HOFFMANN 100 5TH AVENUE SUITE 100 WALTHAM MA 024518727							
				9A. AMENDMENT OF SOLICITATION NO.			
				9B. DATED (SEE ITEM 11)			
				x			
				10A. MODIFICATION OF CONTRACT/ORDER NO.			
				68HERC21D0006			
				68HERC21F0168			
				10B. DATED (SEE ITEM 13)			
				04/08/2021			
CODE 101163731		FACILITY CODE					
<b>11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS</b>							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended. <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or electronic communication which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by letter or electronic communication, provided each letter or electronic communication makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required)							
See Schedule				Net Increase:		\$18,880.00	
<b>13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.</b>							
CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.						
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).						
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:						
X	D. OTHER (Specify type of modification and authority) FAR 52.243-3 Changes						
<b>E. IMPORTANT:</b> Contractor <input checked="" type="checkbox"/> is not <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)							
DUNS Number: 101163731							
TOCOR: NICOLE TUCKER							
The purposes of this Modification are to:							
1) Amend the Task Order Performance Work Statement (PWS), as attached;							
2) Increase Line Item 0001's (Base Period) total ceiling value to \$169,017 as detailed below and in the attached Funding Recap Sheet; and							
Continued ...							
Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)			
				Keith Pfeffer			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA		16C. DATE SIGNED	
				 (Signature of Contracting Officer)		ELECTRONIC SIGNATURE 07/27/2021	
(Signature of person authorized to sign)							

<b>CONTINUATION SHEET</b>	REFERENCE NO. OF DOCUMENT BEING CONTINUED 68HERC21D0006/68HERC21F0168/P00003	PAGE	OF
		2	2

NAME OF OFFEROR OR CONTRACTOR  
Cadmus Group LLC, The

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>3) Add incremental funding to Line Item 0001 in the amount of \$18,880, as detailed below and in the attached Funding Recap Sheet.</p> <p>New Total Amount for this Award: \$201,301.00</p> <p>Obligated Amount for this Modification: \$18,880.00</p> <p>CHANGES FOR LINE ITEM NUMBER: 1</p> <p>Total Amount changed from \$150,137.00 to \$169,017.00</p> <p>Line Item 0001 Incremental Funding Amount of \$18,880 via PR-OW-21-00676 (see below "New Accounting Code Added")</p> <p>NEW ACCOUNTING CODE ADDED: Account code: 21-22-B-40DB-000B53-2505-2140SRE036-001 Beginning FiscalYear 21 Ending Fiscal Year 22 Fund (Appropriation) B Budget Organization 40DB Program (PRC) 000B53 Budget (BOC) 2505 Job # (Site/Project) Cost Organization DCN-LineID 2140SRE036-001 Quantity: 0 Amount: \$18,880.00</p> <p>Payment: RTP Finance Center US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts Durham NC 27711 Period of Performance: 04/08/2021 to 02/28/2022</p>				

**Performance Work Statement – Amended 6/17/21**  
**Contract 68HERC21D0006**  
**Task Order: 68HERC21F0168**

- I. Title: Support for Six-Year Review 4 and Development of CCL 5 Microbes**
- II. Estimated Period of Performance:** See Task Order period of performance clause
- III. Key EPA Personnel:**

**Task Order Contracting Officer's Representative and Technical Expert (TOCOR):**

Name: Nicole Tucker  
Office: OW/OGWDW  
Standards and Risk Management Division  
Address: US EPA, 1200 Pennsylvania Ave, NW  
(4607M) Washington, DC 20460  
Location: 2209F  
Telephone #: 202-564-1946  
Email: tucker.nicole@epa.gov

**Alternate Task Order Contracting Officer's Representative and Technical Expert (ALT-TOCOR):**

Name: Pritidhara (Jini) Mohanty  
Office: OW/OGWDW  
Standards and Risk Management  
Address: Division  
US EPA, 1200 Pennsylvania Ave, NW  
Location: (4607M)  
Washington, DC 20460  
2209S  
Telephone #: 202-564-5269  
Email: mohanty.jini@epa.gov

**IV. BACKGROUND AND PURPOSE**

The 1996 Amendments to the Safe Drinking Water Act (SDWA) requires the U.S. Environmental Protection Agency (EPA) to review its existing drinking water regulations every six years. Section 1412(b)(9) of the SDWA states "The administrator shall, not less often than every 6 years, review and revise, as appropriate, each national primary drinking water regulation (NPDWR) promulgated under this title. Any revision of a national primary drinking water

regulation shall be promulgated in accordance with this section, except that each revision shall maintain, or provide for greater, protection of the health of persons."

Since the 1996 SDWA Amendments were enacted, EPA has completed three comprehensive reviews of existing NPDWRs: Six-Year Review 1 (completed in July 2003), Six-Year Review 2 (completed in March 2010) and Six-Year Review 3 (completed in December 2016). EPA is currently in its fourth Six-Year Review process (SYR 4).

As part of the SYR process, EPA assesses and analyzes new data/information regarding health effects, occurrence, treatment, and analytical methods to evaluate whether there are new or additional ways to estimate and manage risk that will maintain or strengthen public health protection. Potential outputs from the SYR 4 review will include summary documents on health effects, occurrence, treatment, and implementation, as well as other documents to support the SYR decision-making.

Compliance monitoring data and treatment technique information are key components in the SYR process. Through the Information Collection Request (ICR) process, the Agency facilitates data sharing from States in order to obtain comprehensive nationally representative occurrence data. As was done with previous Six-Year Review, EPA requested voluntary submission of its compliance monitoring data and treatment technique information for all regulated chemical, radiological, and microbiological contaminants. The Office of Management and Budget (OMB) approved the ICR for the EPA's fourth Six-Year Review under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 et seq., and assigned the OMB control number 2040-0298.

Following data collection and quality assurance procedures, EPA will conduct an occurrence analysis using data obtained from states through the ICR. The result of this effort will provide EPA with up-to-date data to form a statistically valid sample of regulated contaminant occurrence in water supply systems throughout the nation. EPA follows a protocol for Six-Year Review. The protocol can guide analysis and includes a regulatory review decision tree contains branches with a series of sequential questions that inform a decision about the appropriateness of revising an NPDWR.

Under this task order, EPA is seeking support for its effort pertaining to the microbial rules that EPA expects to review for SYR 4. The SYR 4 will assess new data/information related to microbial contaminants regulated under the Revised Total Coliform Rule (RTCR), Long Term 2 Enhanced Surface Water Treatment Rule (LT2), Groundwater Rule (GWR), and Aircraft Drinking Water Rule (ADWR). EPA anticipates completing the SYR 4 in early 2023.

The 1996 SDWA Amendments also require EPA to publish a list of contaminants that are known or anticipated to occur in public water systems, and which may require regulation under the SDWA, known as the Drinking Water Contaminant Candidate List, or CCL. (Section 1412(b)(1)). The drinking water CCL is a list of contaminants that are currently not subject to any proposed or promulgated NPDWRs but are known or anticipated to occur in public water systems. Contaminants listed on the CCL may require future regulation under the SDWA. The SDWA

directs the Agency to consider the health effects and occurrence information for unregulated contaminants as the Agency makes decisions to place contaminants on the list. SDWA further specifies that the Agency place those contaminants on the list that present the greatest public health concern related to exposure from drinking water. EPA uses the CCL to identify priority contaminants for regulatory decision making and information collection. EPA is currently developing the draft CCL 5. EPA anticipates to complete CCL 5 in 2022.

Under this task order, the contractor shall support EPA's effort to evaluate the existing NPDWRs for effectiveness of public health protection through the Six Year Review process. In addition, this task order shall support EPA in continuing the process of developing a draft and final microbial candidate contaminant list for EPA's CCL process.

## **V. TASKS**

The tasks below provide the contractor with a description of the expected deliverables and time frames.

### **Task 1. Monthly progress reports and administration**

Reports of Work, the contractor shall provide electronic copies of the monthly progress and financial reports to the Contracting Officer, EPA Contract Level COR (CLCOR) (previously titled Project Officer (PO)) and TOCOR. Each progress report shall describe the technical work and expenditures for the same time period as the corresponding invoice. The reports shall list by task the amount of work completed and include a table of hours by personnel for each task. The reports also shall identify any problems or difficulties, lessons learned, Quality Assurance (QA)/Quality Control (QC) activities, and next steps.

Within ten (10) days of task order award, the contractor shall schedule a conference call with the TOCOR to clarify outstanding questions and confirm the schedule and specific tasks.

The contractor shall provide status updates to the TOCOR by conference call periodically (approximately biweekly or more frequently if necessary) to discuss progress, challenges, and decisions regarding next steps.

The contractor shall immediately notify the EPA TOCOR by telephone of any problems that may impede performance, impact QA-related activities, and any corrective actions needed to solve the problems. The contractor shall also include this in the Monthly Technical and Cost Progress Reports.

**Deliverables and schedule under Task 1:** The contractor shall provide monthly progress and financial reports and periodic calls with the EPA.

#### **Deliverables and schedule under Task 1**

<b>Task</b>	<b>Deliverable</b>	<b>Due</b>
1	Progress and financial reports	Monthly after receiving TO award

	Calls with EPA	Bi-weekly after receiving TO award including weekly calls during periods of significant activity
--	----------------	--------------------------------------------------------------------------------------------------

## **Task 2. Quality assurance/quality control**

Quality Assurance is an important component of EPA's work to assure that environmental information is appropriate for its intended use. This Task Order (TO) does not require the contractor to collect or obtain field samples. Tasks 4 will require the contractor the use of secondary data. Therefore, consistent with the Agency's quality assurance (QA) requirements, the contractor shall develop a project-specific quality assurance project plan (PQAPP) to assure that sound quality of the secondary data is used for these tasks. In addition, throughout the course of this call order, if it is determined the PQAPP requires revision, the contractor will provide necessary changes to the TOCOR.

**Deliverables and schedule under Task 2:** The contractor shall provide a PQAPP describing the use of secondary environmental data management within two weeks of award, and a revised PQAPP (if needed) within one week of receiving written comments from the TOCOR.

### **Deliverables and schedule under Task 2**

<b>Task</b>	<b>Deliverables</b>	<b>Due</b>
2a	Draft PQAPP	Within 2 weeks of TO award
2b	Revised PQAPP (if needed)	Within 2 weeks of receiving comments from TOCOR

## **Task 3: Six-Year Review 4 Support**

The compliance monitoring and treatment techniques records collected under the SYR 4 ICR provide the data needed to conduct statistical estimates of national occurrence for regulated contaminants and to evaluate treatment technique information associated with the control of pathogens, disinfectants, and disinfection byproducts. The national occurrence estimates and information on treatment techniques will support the SDWA mandate that requires the EPA to review the existing NPDWRs and determine whether revisions are appropriate.

The contractor shall support EPA with occurrence analyses, reports, and support documents on microbial occurrence data using the SYR 4 ICR compliance monitoring and treatment technique data, as well as other supplemental occurrence data sources.

After consulting with the TOCOR, the contractor shall execute the following tasks:

- Task 3a. Review EPA's draft preliminary data analysis plan, suggest improvements that support analysis objectives, and modify the plan, as appropriate.

- Task 3b. Conduct, record, and report occurrence analyses of the microbial data to support the review of the Revised Total Coliform Rule (RTCR), Ground water Rule (GWR), Long-term 2 Enhanced Surface Water Treatment Rule (LT2), and the Aircraft Drinking Water Rule (ADWR). Currently anticipated analyses are described as: Derive and report detailed estimates of national occurrence of these microbial contaminants. Analysis will consist of: positive counts of Total Coliform (TC), *E. coli* (EC), fecal coliforms, Coliphage, *Enterococci*, *Cryptosporidium*, recorded by raw or finished water sample, source water type (ground water or surface water), system type (community water system, transient non-community water systems, and non-transient non-community water systems), chlorine or chloramines and system size (less than 100, 101-200, 501-1,000, 1001-4100, 4101-33,000, 33,001-100,000, more than 100,000) from the SYR 4 ICR dataset for data collected in years 2012-2019). Conduct similar analyses for TC, EC and other data provided by EPA from ADWR. Analyses are not limited to those described in this task to support decision making under SYR4. Further analyses will be described in the data analysis plan described in Task 3a and by TOCOR. Past occurrence analyses for regulated microbial contaminants can be found in the EPA SYR 3 support document [“Six-Year Review 3 Technical Support Document for Microbial Contaminant Regulations,”](#) and the [“Six-Year Review 3 Technical Support Document for Long-Term 2 Enhanced Surface Water Treatment Rule.”](#)

As directed by the TOCOR, evaluate different approaches and conduct analyses based on EPA small scale pilot analyses, for example to support analyses evaluating a Ground Water Rule treatment technique. Conduct other additional analyses not captured in the preliminary data analysis plan referenced in 3a as directed by the TOCOR. Create interim data analyses products for SYR4 workgroup review.

- Task 3c. Conduct a literature review on health effects and treatment (e.g., evaluating the efficacy of Treatment Technique on disinfecting microbials).
- Task 3d. Based on the results of Tasks 3a to 3c, develop a draft of updated (from Six Year Review 3) technical support document *“Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations”* anticipated to include:
  - History of microbial regulations
  - Health effects
  - Occurrence and exposure
  - Treatment
  - References

Begin the final draft after receiving EPA comments/edits.
- Task 3e. While the review, editing, and formatting of the states database will have been substantially completed previously, additional contractor support may be necessary as discovered during data analysis effort. For example, errors may be detected in the database or updated information could be received from a state or other entity, requiring additional work in the database. Follow up with states about gaps in data as directed by the TOCOR. Adjust data for specified analysis as directed by the TOCOR.
- Task 3f. Revise and complete diagrams for the EPA SYR4 protocol for EPA’s Protocol SYR4 support document.

**Deliverables:** The contractor shall provide support for the data analysis plan by reviewing EPA’s draft analysis plan and providing improvements that support analysis objectives, and modify the plan, as appropriate. The contractor shall conduct occurrence analyses on specified microbial rules as directed by the TOCOR. In addition, the contractor shall conduct exploratory analyses on specified microbial rule(s) with the direction of the TOCOR. The contractor shall also perform a literature search on health effects on specified microbes. Based on the results of Tasks 3a to 3c, develop a draft of updated (from Six Year Review 3) technical support document “Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations” anticipated to include: History of microbial regulations, Health effects, Occurrence and exposure, Treatment, and References. The contractor shall also revise and complete diagrams for the EPA SYR4 protocol for EPA’s Protocol SYR4 support document.

### Deliverables and schedule under Task 3

Task	Deliverables	Due Date
3a	Provide suggestions to EPA Data Analysis Plan	Within 2 weeks of PQAPP approval unless TOCOR agrees to a later date
	Revise Data Analysis Plan (if needed)	Within 5 weeks of PQAPP unless TOCOR agrees to a later date
3b	Draft Data Analysis	September 8, 2021 unless TOCOR agrees to a later date
	Final Data Analysis	Within 1 month after comments are provided by the TOCOR on any revisions.
3c	Literature review on health effects and treatment	October 15, 2021 unless TOCOR agrees to a later date
3d	Revised draft Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations.	January 31, 2022 unless TOCOR agrees to a later date
3e	Add documentation to Quality Assurance and Data Management document	As needed
3f	Revise and complete diagrams for the EPA SYR4 protocol.	January 31, 2022 unless TOCOR agrees to a later date

#### Task 4. Microbial Contaminant Candidate List 5

After consulting with the TOCOR, the contractor shall support EPA in compiling and categorizing public comments (regarding the microbial contaminants) associated with Federal Register Notice for the draft CCL 5 and finalizing the CCL 5 Microbial Support document by addressing comments and revisions requested in the support document from EPA management review, Science Advisory Board comments, and a public comment period. The comments are expected to be of a scientific and technical nature related to microbial health effects and occurrence. The final CCL Microbial Support document, with the revisions included and comments addressed, shall not exceed 300 pages in total (the current draft is approximately 226 pages). The contractor shall update or revise any additional supporting files as needed including if the comments received require it (e.g., Excel spreadsheets, Contaminant Information Sheets (CIS), Microsoft word documents) and support development of a comment response document. EPA estimates up to 8-10 additional support materials may need revision (most needing no more than 5 pages each, with the comment response support estimated 20 pages dependent upon the amount of comments received). The contractor shall support EPA in making the Microbial support document 508 compliant.

**Deliverables:** The contractor shall provide draft and final clean and track changes versions of the CCL 5 Microbial Support Document of an estimated 260-300 pages, plus an estimated 8-10 supporting files.

#### Deliverables and schedule under Task 4

Task	Deliverable	Due Date
4a	Support for response to comments from FRN draft CCL 5	Within 1 month of comments received
4b	Draft support documents and supporting files	Within two months of the TO award
	Finalize support documents and supporting files	Within 1 month after comments are provided by the TOCOR on revised draft support document.

#### Option Period 1

#### Task 5

Based on the results of Tasks 3a to 3d, develop a final updated (from Six-Year Review 3) technical support document “*Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations*” to include:

- History of microbial regulations
- Health effects
- Occurrence and exposure
- Treatment
- References

#### **Deliverables and schedule under Task 5**

<b>Task</b>	<b>Deliverable</b>	<b>Due Date</b>
5	Final Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations.	Within 1 month after comments are provided by the TOCOR on revised draft support document.

#### **Task 6**

Based on the results of Task 4, complete any remaining support materials as needed for CCL 5.

#### **Deliverables and schedule under Task 5**

<b>Task</b>	<b>Deliverable</b>	<b>Due Date</b>
6	Finalize remaining support documents and supporting files.	Within 1 month after comments are provided by the TOCOR on revised draft support document and supporting files.

### **VI. General Requirements of the Task Order and Schedule**

Work conducted under this Task Order shall not duplicate work conducted under any other Task Order or Work Assignment under any other contract.

Confidential Business Information (CBI): For this Task Order, the contractor shall not be accessing any Confidential Business Information (CBI).

Identification as Contracting Staff: To avoid the perception that contractor personnel are EPA employees, the contractor personnel shall be clearly identified as independent contractors of EPA when participating in events with outside parties and prior to the start of any meeting. The contractor personnel are prohibited from acting as the Agency's official representative. When speaking with the public, the contractor shall refer all interpretations of policy to the TOCOR.

Limitation of Contractor Activities: The contractor shall submit drafts of all deliverables to the TOCOR for review prior to submission of the final product. These drafts will clearly specify the methods, procedures, considerations, assumptions, relevant citations, data sources and data that support any conclusions and recommendations. The contractor shall incorporate all TOCOR and EPA team member comments into all final deliverables, unless otherwise agreed upon by the TOCOR or where discrepancies exist. The contractor shall adhere to all applicable EPA management control procedures as implemented by the EPA Contracting Officer (CO), Project Officer (PO), and TOCOR.

Quick Response: Under this Performance Work Statement (PWS), the contractor may be required to provide information for use by EPA for quick responses and analyses of options, issues, and policy decisions. Quick responses are those which require completion in one to five working days.

Travel: Travel is not anticipated under this Performance Work Statement (PWS).

Deliverable Formatting: All memos, draft comments, summaries and responses, chapters, and presentations are to be provided in electronic form using Word and/or Excel/Access, Power Point, or, in special cases another software program agreed to by the TOCOR. Memos are to be written in a manner which will make them easy to conform into draft chapters for the Final Report. For deliverables that are in Word or pdf versions of Word documents, that are intended to be shared with management or the public, the contractor shall use decimal align in all tables containing columns of numbers of varying digits, whether decimal places are reported or not. All final materials, e.g., memos, chapters, etc. are to be compliant with Section 508 Amendment to the Rehabilitation Act of 1973.

## **VII. BASE PERIOD DELIVERABLES**

All deliverables shall be in accordance with the contract level PWS, Section F.

<b>Task</b>	<b>Deliverables</b>	<b>Due</b>
1	Progress and financial reports	Monthly
	Calls with EPA	Bi-weekly, weekly calls during periods of intense activity
2	Draft and Revised PQAPP	Within 2 weeks of TO award for the draft and within 2 weeks of receiving written comments from the TOCOR for the revised PQAPP.
3a	Provide suggestions to EPA Data Analysis Plan and Revised Data Analysis Plan (if needed)	Within 2 weeks of PQAPP approval unless TOCOR agrees to a later date and within 5 weeks of PQAPP unless TOCOR agrees to a later date
3b	Draft Data Analysis	September 8, 2021 unless TOCOR agrees to a later date
	Final Data Analysis	Within 1 month after comments are provided by the TOCOR on any revisions.
3c	Literature review on health effects and treatment	October 15, 2021 unless TOCOR agrees to a later date

3d	Revised draft Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations.	January 31, 2022 unless TOCOR agrees to a later date
3e	Updating Quality Assurance and Data Management document	As needed
3f	Revise and complete diagrams for the EPA SYR4 protocol.	January 31, 2022 unless TOCOR agrees to a later date
4a	Support for response to comments received from FRN draft CCL 5	Within 1 month after comments are received
4b	Draft support documents and supporting files	Within two months of the TO award
	Final support documents and supporting files	Within 1 month after comments are provided by the TOCOR on revised draft support document.

#### VIII. OPTION 1 PERIOD DELIVERABLES

Task	Deliverable	Due Date
5	Final Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations.	Within 1 month after comments are provided by the TOCOR on revised draft support document.
6	Final additional support documents and supporting files for CCL 5.	Within 1 month after comments are provided by the TOCOR on draft documents and supporting files.

## **SECTION B - Supplies or Services/Prices**

### **B-1 Local Clauses EPA-B-32-103 LIMITATION OF GOVERNMENT'S OBLIGATION**

(a) Severable services may be incrementally funded. Non-severable services shall not be incrementally funded. Contract line item 0001 is severable and may be incrementally funded. For this item, the sum of \$169,017.00 of the total price is presently available for payment and allotted to this item.

(b) For items identified in paragraph (a) of this clause, the Contractor agrees to perform up to the point at which the total amount payable by the Government, including reimbursement in the event of termination of those items for the Government's convenience, approximates the total amount currently allotted for those items to the contract. The Contractor shall not continue work on those items beyond that point. Subject to the clause entitled "Termination for Convenience of the Government," the Government will not be obligated, under any circumstances, to reimburse the Contractor in excess of the amount payable by the Government in the event of the termination of applicable contract line items for convenience including costs, profit, and estimated termination costs for those line items.

(c) Notwithstanding the dates specified in the allotment schedule in paragraph (h) of this clause, the Contractor will notify the Contracting Officer, in writing, at least 10 days prior to the date when, in the Contractor's best judgment, the work will reach the point at which the total amount payable by the Government, including any cost for termination for convenience, will approximate 85 percent of the total amount currently allotted to the contract for performance of the applicable items. The notification will state (1) the estimated date when that point will be reached and (2) an estimate of additional funding, if any, needed to continue performance of the applicable line items up to the next scheduled date for the allotment of funds identified in paragraph (a) of this clause, or to a substitute date as determined by the Government pursuant to paragraph (d) of this clause. If, after such notification, additional funds are not allotted by the date identified in the Contractor's notification, or by an agreed substitute date, the Contracting Officer will terminate any item(s) for which additional funds have not been allotted, pursuant to the clause entitled "Termination for Convenience of the Government."

(d) The parties contemplate that, subject to the availability of appropriations, the Government may allot additional funds for continued performance of the contract line items identified in paragraph (a) of this clause and will determine the estimated period of contract performance which will be covered by the funds. If additional funds are allotted, the Contracting Officer will notify the Contractor in writing. The Contractor shall not resume performance of the contract line items identified in paragraph (a) until the written notice is received. The provisions of paragraphs (b) through (d) of this clause will apply in like manner to the additional allotted funds and to the new estimated period of contract performance. The contract will be modified accordingly.

(e) The Government may, at any time prior to termination, allot additional funds for the performance of the contract line items identified in paragraph (a) of this clause.

(f) The termination provisions of this clause do not limit the rights of the Government under the clause entitled "Default". The provisions of this clause are limited to the work and allotment of funds for the contract line items set forth in paragraph (a) of this clause. This clause no longer applies once the contract is fully funded.

(g) Nothing in this clause affects the right of the Government to otherwise terminate this contract pursuant to the contract clause entitled "Termination for Convenience of the Government".

(h) The parties contemplate that the Government may obligate funds to this contract in accordance with the following schedule:

RECAPITULATION:

**RECAPITULATION OF FUNDING TO DATE**  
**CONTRACT NO. 68HERC21D0006**  
**TASK ORDER NO. 68HERC21F0168**

**Base Period of Performance - FROM 04/08/2021 through 02/28/2022**

<b>FUNDING ACTION</b>	<b>FUNDING</b>
<b>Total Line 0001 Amount</b>	<b>\$169,017</b>
<b>Initial Funding</b>	<b>\$100,000</b>
<b>Incremental Funding (P00001)</b>	<b>\$50,137</b>
<b>Incremental Funding (P00003)</b>	<b>\$18,880</b>
<b>Balance Unfunded</b>	<b>\$0.00</b>

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE		PAGE OF PAGES		
					13		
2. AMENDMENT/MODIFICATION NO.		3. EFFECTIVE DATE		4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO. (If applicable)	
P00004		See Block 16C		PR-OW-22-00194			
6. ISSUED BY		CODE		7. ADMINISTERED BY (If other than Item 6)		CODE	
CAD							
US Environmental Protection Agency							
26 West Martin Luther King Drive							
Mail Code: W136							
Cincinnati OH 45268-0001							
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)				(x)		9A. AMENDMENT OF SOLICITATION NO.	
Cadmus Group LLC, The							
Attn: JING HOFFMANN						9B. DATED (SEE ITEM 11)	
100 5TH AVENUE							
SUITE 100							
WALTHAM MA 024518727				x		10A. MODIFICATION OF CONTRACT/ORDER NO.	
						68HERC21D0006	
						68HERC21F0168	
						10B. DATED (SEE ITEM 13)	
						04/08/2021	
CODE 101163731		FACILITY CODE					
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended. <input type="checkbox"/> is not extended.							
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or electronic communication which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by letter or electronic communication, provided each letter or electronic communication makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required)							
See Schedule Net Increase: \$130,000.00							
13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
CHECK ONE							
A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.							
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).							
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:							
D. OTHER (Specify type of modification and authority)							
X Clause H-7 EPAAR 1552.217-75							
E. IMPORTANT: Contractor <input checked="" type="checkbox"/> is not <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)							
DUNS Number: 101163731							
TOCOR: NICOLE TUCKER InvoiceApprover: Nicole Tucker Alt Invoice App: Jini Mohanty							
The purposes of this task order modification are to:							
1) Reduce the time-and-materials ceiling value of the Base Period (Item 0001) FROM \$169,017.00 TO \$155,346.00 as a result of the attached amended PWS;							
2) Exercise Option Period 1 (Item 0002), which is a severable services line item with a REVISED time-and-materials ceiling value of \$148,079.00; and							
3) Add \$130,000.00 of incremental funding to Item 0002.							
Together, these changes result in a net task order increase of \$102,124.00.							
Continued ...							
Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)			
				Keith Pfeffer			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA		16C. DATE SIGNED	
(Signature of person authorized to sign)				ELECTRONIC SIGNATURE		02/10/2022	
Previous edition unusable				(Signature of Contracting Officer)			

<b>CONTINUATION SHEET</b>	REFERENCE NO. OF DOCUMENT BEING CONTINUED 68HERC21D0006/68HERC21F0168/P00004	PAGE	OF
		2	3

NAME OF OFFEROR OR CONTRACTOR  
Cadmus Group LLC, The

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>See below and the attached Funding Recap sheet for Item 0001 and Item 0002.</p> <p>LIST OF CHANGES:</p> <p>Total Amount for this Modification: \$102,124.00</p> <p>New Total Amount for this Version: \$303,425.00</p> <p>Obligated Amount for this Modification: \$130,000.00</p> <p>CHANGES FOR LINE ITEM NUMBER: 1</p> <p>Total Amount changed from \$169,017.00 to \$155,346.00</p> <p>CHANGES FOR LINE ITEM NUMBER: 2</p> <p>Total Amount changed from \$32,284.00 to \$148,079.00</p> <p>End Date changed from 30-SEP-22 to 28-FEB-23</p> <p>Exercised option</p> <p>NEW ACCOUNTING CODE ADDED: Account code: 22-23-B-40DF-000B53-2505-2240SRE006-001 Beginning FiscalYear 22 Ending Fiscal Year 23 Fund (Appropriation) B Budget Organization 40DF Program (PRC) 000B53 Budget (BOC) 2505 Job # (Site/Project) Cost Organization DCN-LineID 2240SRE006-001 Quantity: 0 Amount: \$130,000.00</p> <p>Continued ...</p>				

NAME OF OFFEROR OR CONTRACTOR  
Cadmus Group LLC, The

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Payment: RTP Finance Center US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts Durham NC 27711 Period of Performance: 04/08/2021 to 02/28/2023				

**Performance Work Statement  
Contract 68HERC21D0006  
Task Order Tracking Number: 68HERC21F0168**

**I. Title: Support for Six-Year Review 4 and Development of CCL 5 Microbes**

**II. Estimated Period of Performance:**

Base Year: Awarded through February 28, 2022

Option Year 1: March 1, 2022 to February 28, 2023

**III. Key EPA Personnel:**

**Task Order Contracting Officer's Representative and Technical Expert (TOCOR):**

Name: Nicole Tucker  
Office: OW/OGWDW  
Standards and Risk Management Division  
Address: US EPA, 1200 Pennsylvania Ave, NW  
(4607M) Washington, DC 20460  
Location: 2209F  
Telephone #: 202-564-1946  
Email: [tucker.nicole@epa.gov](mailto:tucker.nicole@epa.gov)

**Alternate Task Order Contracting Officer's Representative and Technical Expert (ALT-TOCOR):**

Name: Pritidhara (Jini) Mohanty  
Office: OW/OGWDW  
Address: Standards and Risk Management Division  
US EPA, 1200 Pennsylvania Ave, NW  
(4607M)  
Washington, DC 20460  
Location: 2209S  
Telephone #: 202-564-5269  
Email: [mohanty.jini@epa.gov](mailto:mohanty.jini@epa.gov)

**IV. BACKGROUND AND PURPOSE**

The 1996 Amendments to the Safe Drinking Water Act (SDWA) requires the U.S. Environmental Protection Agency (EPA) to review its existing drinking water regulations every six years. Section 1412(b)(9) of the SDWA states "The administrator shall, not less often than every 6 years, review and revise, as appropriate, each national primary drinking water regulation (NPDWR) promulgated under this title. Any revision of a national primary drinking water regulation shall be promulgated in accordance with this section, except that each revision shall maintain, or provide for greater, protection of the health of persons."

Since the 1996 SDWA Amendments were enacted, EPA has completed three comprehensive reviews of existing NPDWRs: Six-Year Review 1 (completed in July 2003), Six-Year Review 2 (completed in March 2010) and Six-Year Review 3 (completed in December 2016). EPA is currently in its fourth Six-Year Review process (SYR 4).

As part of the SYR process, EPA assesses and analyzes new data/information regarding health effects, occurrence, treatment, and analytical methods to evaluate whether there are new or additional ways to estimate and manage risk that will maintain or strengthen public health protection. Potential outputs from the SYR 4 review will include summary documents on health effects, occurrence, treatment, and implementation, as well as other documents to support the SYR decision-making.

Compliance monitoring data and treatment technique information are key components in the SYR process. Through the Information Collection Request (ICR) process, the Agency facilitates data sharing from States in order to obtain comprehensive nationally representative occurrence data. As was done with previous Six-Year Review, EPA requested voluntary submission of its compliance monitoring data and treatment technique information for all regulated chemical, radiological, and microbiological contaminants. The Office of Management and Budget (OMB) approved the ICR for the EPA's fourth Six-Year Review under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 et seq., and assigned the OMB control number 2040-0298.

Following data collection and quality assurance procedures, EPA will conduct an occurrence analysis using data obtained from states through the ICR. The result of this effort will provide EPA with up-to-date data to form a statistically valid sample of regulated contaminant occurrence in water supply systems throughout the nation. EPA follows a protocol for Six-Year Review. The protocol can guide analysis and includes a regulatory review decision tree contains branches with a series of sequential questions that inform a decision about the appropriateness of revising an NPDWR.

Under this task order, EPA is seeking support for its effort pertaining to the microbial rules and the chemical contaminant fluoride that EPA expects to review for SYR 4. The SYR 4 will assess new data/information related to microbial contaminants regulated under the Revised Total Coliform Rule (RTCR), Long Term 2 Enhanced Surface Water Treatment Rule (LT2), Groundwater Rule (GWR), and Aircraft Drinking Water Rule (ADWR). In addition will develop supporting material for the chemical contaminant fluoride. EPA anticipates completing the SYR 4 in early 2023.

The 1996 SDWA Amendments also require EPA to publish a list of contaminants that are known or anticipated to occur in public water systems, and which may require regulation under the SDWA, known as the Drinking Water Contaminant Candidate List, or CCL. (Section 1412(b)(1)). The drinking water CCL is a list of contaminants that are currently not subject to any proposed or promulgated NPDWRs but are known or anticipated to occur in public water systems. Contaminants listed on the CCL may require future regulation under the SDWA. The SDWA directs the Agency to consider the health effects and occurrence information for unregulated contaminants as the Agency makes decisions to place contaminants on the list. SDWA further specifies that the Agency place those contaminants on the list that present the greatest public health concern related to exposure from drinking water. EPA uses the CCL to identify priority contaminants for regulatory decision making and information collection. EPA is currently developing the draft CCL 5. EPA anticipates to complete CCL 5 in 2022.

Under this task order, the contractor shall support EPA's effort to evaluate the existing NPDWRs for effectiveness of public health protection through the Six Year Review process. In addition, this task order shall support EPA in continuing the process of developing a draft and final microbial candidate contaminant list for EPA's CCL process.

## V. TASKS

The tasks below provide the contractor with a description of the expected deliverables and time frames.

### Task 1. Monthly progress reports and administration

Reports of Work, the contractor shall provide electronic copies of the monthly progress and financial reports to the Contracting Officer, EPA Contract Level COR (CLCOR) (previously titled Project Officer (PO)) and TOCOR. Each progress report shall describe the technical work and expenditures for the same time period as the corresponding invoice. The reports shall list by task the amount of work completed and include a table of hours by personnel for each task. The reports also shall identify any problems or difficulties, lessons learned, Quality Assurance (QA)/Quality Control (QC) activities, and next steps.

Within ten (10) days of task order award, the contractor shall schedule a conference call with the TOCOR to clarify outstanding questions and confirm the schedule and specific tasks.

The contractor shall provide status updates to the TOCOR by conference call periodically (approximately biweekly or more frequently if necessary) to discuss progress, challenges, and decisions regarding next steps.

The contractor shall immediately notify the EPA TOCOR by telephone of any problems that may impede performance, impact QA-related activities, and any corrective actions needed to solve the problems. The contractor shall also include this in the Monthly Technical and Cost Progress Reports.

**Deliverables and schedule under Task 1:** The contractor shall provide monthly progress and financial reports and periodic calls with the EPA. The contractor shall also provide mid-month spending estimates.

**Deliverables and schedule under Task 1**

Task	Deliverable	Due
1	Progress and financial reports	Monthly after receiving TO award
	Mid-monthly financial estimates	Mid-month every month until February 28, 2022
	Calls with EPA	Bi-weekly after receiving TO award including weekly calls during periods of significant activity

### Task 2. Quality assurance/quality control

Quality Assurance is an important component of EPA's work to assure that environmental information is appropriate for its intended use. This Task Order (TO) does not require the contractor to collect or obtain field samples. Tasks 4 will require the contractor the use of secondary data. Therefore, consistent

with the Agency's quality assurance (QA) requirements, the contractor shall develop a project-specific quality assurance project plan (PQAPP) to assure that sound quality of the secondary data is used for these tasks. In addition, throughout the course of this call order, if it is determined the PQAPP requires revision, the contractor will provide necessary changes to the TOCOR.

**Deliverables and schedule under Task 2:** The contractor shall provide a PQAPP describing the use of secondary environmental data management within two weeks of award, and a revised PQAPP (if needed) within one week of receiving written comments from the TOCOR.

**Deliverables and schedule under Task 2**

Task	Deliverables	Due
2a	Draft PQAPP	Within 2 weeks of TO award
2b	Revised PQAPP (if needed)	Within 2 weeks of receiving comments from TOCOR

### **Task 3: Six-Year Review 4 Support- Base period**

The compliance monitoring and treatment techniques records collected under the SYR 4 ICR provide the data needed to conduct statistical estimates of national occurrence for regulated contaminants and to evaluate treatment technique information associated with the control of pathogens, disinfectants, and disinfection byproducts. The national occurrence estimates and information on treatment techniques will support the SDWA mandate that requires the EPA to review the existing NPDWRs and determine whether revisions are appropriate.

The contractor shall support EPA with occurrence analyses, reports, and support documents on microbial occurrence data using the SYR 4 ICR compliance monitoring and treatment technique data, as well as other supplemental occurrence data sources.

After consulting with the TOCOR, the contractor shall execute the following tasks:

- Task 3a. Review EPA's draft preliminary data analysis plan, suggest improvements that support analysis objectives, and modify the plan, as appropriate.
- Task 3b. Conduct, record, and report occurrence analyses of the microbial data to support the review of the Revised Total Coliform Rule (RTCR), Ground water Rule (GWR), Long-term 2 Enhanced Surface Water Treatment Rule (LT2), and the Aircraft Drinking Water Rule (ADWR). Currently anticipated analyses are described as: Derive and report detailed estimates of national occurrence of these microbial contaminants. Analysis will consist of: positive counts of Total Coliform (TC), *E. coli* (EC), fecal coliforms, Coliphage, *Enterococci*, *Cryptosporidium*, recorded by raw or finished water sample, source water type (ground water or surface water), system type (community water system, transient non-community water systems, and non-transient non-community water systems), disinfectant type (chlorine or chloramines) and system size (less than 100, 101-200, 501-1,000, 1001-4100, 4101-33,000, 33,001-100,000, more than 100,000) from the SYR 4 ICR dataset for data collected in years 2012-2019. Conduct similar analyses for TC, EC

and other data provided by EPA from ADWR. Analyses are not limited to those described in this task to support decision making under SYR4. Further analyses will be described in the data analysis plan described in Task 3a and by TOCOR. Past occurrence analyses for regulated microbial contaminants can be found in the EPA SYR 3 support document [“Six-Year Review 3 Technical Support Document for Microbial Contaminant Regulations,”](#) and the “Six-Year Review 3 Technical Support Document for Long-Term 2 Enhanced Surface Water Treatment Rule.”

~~As directed by the TOCOR, evaluate different approaches and conduct analyses based on EPA small scale pilot analyses, for example to support analyses evaluating a Ground Water Rule treatment technique. Conduct other additional analyses not captured in the preliminary data analysis plan referenced in 3a as directed by the TOCOR. Create interim data analyses products for SYR4 workgroup review.~~ [moved, became 3g]

The contractor shall create interim data analyses, summary and synthesis products for SYR4 team and workgroup review.

- Task 3c. Conduct a literature review on health effects and treatment (e.g., evaluating the efficacy of Treatment Technique on disinfecting microbials).
- Task 3d. Based on the results of Tasks 3a to 3c, ~~develop a draft of updated~~ develop updated drafts of chapters (from Six Year Review 3) of technical support document “Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations” anticipated to include:
  - o History of microbial regulations
  - o Health effects
  - ~~o Occurrence and exposure~~
  - o Treatment
  - o References
 Begin the final draft after receiving EPA comments/edits.
- Task 3e. While the review, editing, and formatting of the states database will have been substantially completed previously, additional contractor support may be necessary as discovered during data analysis effort. For example, errors may be detected in the database or updated information could be received from a state or other entity, requiring additional work in the data. Follow up with states about gaps in data as directed by the TOCOR. Adjust data for specified analysis as directed by the TOCOR.
- Task 3f. Revise and complete diagrams for the EPA SYR4 protocol for EPA’s Protocol SYR4 support document.
- Task 3g. As directed by the TOCOR, evaluate different approaches and conduct analyses based on EPA small scale pilot analyses, for example to support analyses evaluating a Ground Water Rule treatment technique. Conduct other additional analyses not captured in the preliminary data analysis plan referenced in 3a, as directed by the TOCOR. Create interim data analyses products, summary and synthesis products for SYR4 team and workgroup review.
- Task 3h. Recreate Markov chain Monte Carlo modelling and Bayesian statistics (used for SYR3 data) and evaluate for SYR4 ICR data for occurrence of Total Coliform and/or E. Coli in undisinfected ground water systems (using year(s) determined by TOCOR) and provide write-up.

**Deliverables:** The contractor shall provide support for the data analysis plan by reviewing EPA’s draft analysis plan and providing improvements that support analysis objectives, and modify the

plan, as appropriate. The contractor shall conduct occurrence analyses on specified microbial rules as directed by the TOCOR. In addition, the contractor shall conduct exploratory analyses on specified microbial rule(s) with the direction of the TOCOR. The contractor shall also perform a literature search on health effects on specified microbes. Based on the results of Tasks 3a to 3c, ~~develop a draft of updated~~ **develop updated drafts of chapters** (from Six Year Review 3) technical support document "Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations" anticipated to include: History of microbial regulations, Health effects, ~~Occurrence and exposure~~, Treatment, and References. The contractor shall also revise and complete diagrams for the EPA SYR4 protocol for EPA's Protocol SYR4 support document. **Evaluate different approaches and conduct analyses based on EPA small scale pilot analyses, for example to support analyses evaluating a Ground Water Rule treatment technique (as directed by the TOCOR). Conduct other additional analyses not captured in the preliminary data analysis plan referenced in 3a, as directed by the TOCOR.** Create interim data analyses products, **summary and synthesis products** for SYR4 **team and** workgroup review. **Recreate Markov chain Monte Carlo modelling and Bayesian statistics (used for SYR3 data) and evaluate for SYR4 ICR data for occurrence of Total Coliform and/or E. coli in undisinfected ground water systems (using year(s) determined by TOCOR) and provide write-up.**

#### Deliverables and schedule under Task 3

Task	Deliverables	Due Date
3a	Provide suggestions to EPA Data Analysis Plan	Within 2 weeks of PQAPP approval unless TOCOR agrees to a later date
	Revise Data Analysis Plan (if needed)	Within 4 weeks of PQAPP unless TOCOR agrees to a later date
3b	Draft Data Analysis	<del>September 8, 2021 unless TOCOR agrees to a later date.</del> <b>Interim data analysis products delivery dates directed by TOCOR.</b>
	Final Data Analysis	Within 1 month after comments are provided by the TOCOR on any revisions.
3c	Literature review on health effects and treatment	<del>October 15, 2021 unless TOCOR agrees to a later date.</del> <b>January 14, 2022 and January 24, 2022, respectively.</b>
3d	Revised draft <b>chapters</b> of Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations; History of Microbial Regulations, Health Effects and <b>Treatment and References</b>	<del>January 31, 2022 unless TOCOR agrees to a later date.</del> <b>February 15, 2022 or as directed by written technical direction by the TOCOR.</b>

3e	<p>Add documentation to Quality Assurance and Data Management document</p> <p>Additional contractor support may be necessary as discovered during data analysis effort. For example, errors may be detected in the database or updated information could be received from a state or other entity, requiring additional work in the data. Follow up with states about gaps in data as directed by the TOCOR. Adjust data for specified analysis as directed by the TOCOR.</p>	As needed
3f	<p>Revise and complete diagrams for the EPA SYR4 protocol.</p>	January 31, 2022 unless TOCOR agrees to a later date.
3g	<p>As directed by the TOCOR, evaluate different approaches and conduct analyses based on EPA small scale pilot analyses, for example to support analyses evaluating a Ground Water Rule treatment technique. Conduct other additional analyses not captured in the preliminary data analysis plan referenced in 3a, as directed by the TOCOR. Create interim data analyses, summary and synthesis products for SYR4 workgroup review.</p>	<p>Within 3 weeks after clarification received from TOCOR or as directed by written technical direction by the TOCOR.</p>
3h	<p>Recreate Markov chain Monte Carlo modelling and Bayesian statistics (used for SYR3 data) and evaluate for SYR4 ICR data for occurrence of Total Coliform and/or E. Coli in undisinfected ground water systems</p>	<p>Within 3 weeks after clarification received from TOCOR, or as directed by written technical direction by the TOCOR.</p>

	(using year(s) determined by TOCOR) and provide write-up.	
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#### **Task 4. Microbial Contaminant Candidate List 5 -Base period**

After consulting with the TOCOR, the contractor shall support EPA in compiling and categorizing public comments (regarding the microbial contaminants) associated with Federal Register Notice for the draft CCL 5 and finalizing the CCL 5 Microbial Support document by addressing comments and revisions requested in the support document from EPA management review, Science Advisory Board comments, and a public comment period. The comments are expected to be of a scientific and technical nature related to microbial health effects and occurrence. The final CCL Microbial Support document, with the revisions included and comments addressed, shall not exceed 300 pages in total (the current draft is approximately 226 pages). The contractor shall update or revise any additional supporting files as needed including if the comments received require it (e.g., Excel spreadsheets, Contaminant Information Sheets (CIS), Microsoft word documents) and support development of a comment response document. EPA estimates up to 8-10 additional support materials may need revision (most needing no more than 5 pages each, with the comment response support estimated 20 pages dependent upon the amount of comments received). The contractor shall support EPA in making the Microbial support document 508 compliant.

**Deliverables:** The contractor shall provide draft and final clean and track changes versions of the CCL 5 Microbial Support Document of an estimated 260-300 pages, plus an estimated 8-10 supporting files.

#### **Deliverables and schedule under Task 4**

<b>Task</b>	<b>Deliverable</b>	<b>Due Date</b>
4a	Support for response to comments from FRN draft CCL 5	Within 1 month of comments received
4b	Draft support documents and supporting files	Within two months of the TO award
	Finalize support documents and supporting files	Within 1 month after comments are provided by the TOCOR on revised draft support document.

#### **Task 5- Support for Six Year 4-Option Period 1**

Under Task 5, the contractor shall continue to update the draft technical support document entitled “Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations” and to produce a final document under this task. Under Task 5, the contractor shall support any revisions to occurrence analyses, reports, or write-ups under this Task, as needed and directed by the TOCOR.

- **Task 5a.** Based on the results of Tasks 3a to 3d, develop drafts and a final updated (from Six-Year Review 3) technical support document “*Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations*”. Develop drafts and final versions of this document, revising depending on workgroup and management feedback to include:
  - History of microbial regulations
  - Health effects
  - Occurrence and exposure
  - Treatment
  - References
- **Task 5b.** Prepare summary of analyses conducted under task 3a to 3c under this PWS prior to Workgroup discussions on analytical results. As needed, revise analyses and prepare new summaries based on workgroup feedback. Revise analyses and prepare new summaries before and after management and senior management briefings. Finalize analyses and provide summary document with results.
- **Task 5c.** If necessary, and as directed by the TOCOR, make any changes or updates to the QA Data Management document and/or protocol diagrams.
- **Task 5d.** Develop a draft and final Health Effects section for Fluoride in the SYR4 chemical support document (using EPA input on Health and occurrence). Conduct literature review including updating history/events regarding fluoride in drinking water since 2016 (e.g., CDC changing point level of 0.7mg/L versus range for fluoridation). Add EPA’s fluoride health effects findings and references to chemicals health effects support document
- **Task 5e.** Create briefing material, presentations, tables, including one-time use tables (as needed)
- **Task 5f.** Complete any analyses and/or items not completed in the base period from Tasks 3b, 3f, and 3g.
- **Task 5g.** Conduct any additional literature reviews if needed for health effects and treatment.

### Deliverables and schedule under Task 5

Task	Deliverable	Due Date
5a	<p>Draft 1: Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations.</p> <p>Draft 2: Updated Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations prior to management briefings</p> <p>Draft 3: Updated Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations after management briefings.</p> <p>Create a 508 compliant version of the Six Year Review 4 Technical Support Document for Microbial Contaminant Regulations.</p>	<p>Within 2 weeks after comments are provided by the TOCOR on revised draft support document or as directed by written technical direction by the TOCOR.</p> <p>Within 1 month after workgroup input is received or as directed by written technical direction by the TOCOR.</p> <p>Within 1 month after management input has been received or as directed by written technical direction by the TOCOR.</p> <p>Within 2 weeks after materials are finalized or as directed by written technical direction by the TOCOR.</p>
5b	<p>Revise analyses before and after workgroup and management briefings and meetings.</p> <p>Finalize analyses and provide summary document with results</p>	<p>Within 2 weeks of management and/or workgroup feedback, or as directed by written technical direction by the TOCOR.</p> <p>Within 2 weeks after receipt of final TOCOR feedback, or as directed by written technical direction by the TOCOR.</p>
5c	As needed, changes or updates to QA Data Management document and/or protocol diagrams.	Within 2 weeks after request from TOCOR.
5d	Develop a draft and final Health Effects section for Fluoride in the SYR4 chemical support document (using EPA input on Health and occurrence).	Within 2 months of TO award, or as directed by written technical direction by the TOCOR.

	Develop final Health Effects section for Fluoride document and compile associated references	Within 2 weeks of receipt of final TOCOR feedback, or as directed by written technical direction by the TOCOR.
5e	Create briefing material, presentations, tables, including one-time use tables (as needed)	Within a week after request from TOCOR or as directed by written technical direction by the TOCOR.
5f	Complete any analyses and/or items not completed in the base period from Tasks 3b, 3g, and 3h.	Within a week after request from TOCOR or as directed by written technical direction by the TOCOR.
5g	Conduct any additional literature reviews, if needed, for health effects and treatment.	Within a week after request from TOCOR or as directed by written technical direction by the TOCOR.

**Deliverables:** Updated versions and ultimately a final version of analyses and the SYR4 technical support document “Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations” (including making a 508 compliant version), a draft and final Health Effects section for Fluoride to be added to the SYR4 chemical support document (using EPA input on Health and occurrence), create briefing material, presentations, tables, including one-time use tables (as needed). Complete any analyses and/or items not completed in the base period from Tasks 3b, 3g, and 3h. Conduct any additional literature reviews if needed for health effects and treatment (as needed). Update the QA Data Management Document and/or protocol document (as needed).

#### Task 6 – CCL 5 Microbes-Option Period 1

Based on the results of Task 4, complete any remaining support materials as needed for CCL 5 Microbes. The contractor shall provide support with formatting, drafting and revising tables, designing diagrams, figures, providing editorial review, and ensuring that the support documents are 508 compliant.

Upon written technical direction from the EPA TOCOR, the contractor shall edit support documents based on any changes made between the Draft CCL 5 and Final CCL 5 based on public, SAB, workgroup or management feedback and comments.

Upon written technical direction from the EPA TOCOR, the contractor shall finalize and make 508 compliant the Final CCL 5 Technical Support Document and other support documents (CIS document, Response to Comments (RTC), response to the SAB report, etc.) for finalizing the CCL 5.

The contractor shall begin efforts for developing CCL 6 Microbes, including developing or updating Contaminant Information Sheets (CISs), evaluate data sources, conducting literature searches for additions to the microbial universe, and begin updating chapters of the CCL 5 microbial technical

support document “Technical Support Document for the Draft Fifth Contaminant Candidate List (CCL 5)- Microbial Contaminants.

#### Deliverables and schedule under Task 5

Task	Deliverable	Due Date
6a	Finalize remaining support documents and supporting files for Final CCL 5 (508 compliant)	Within 2 weeks after comments are provided by the TOCOR on revised draft support document and supporting files or as directed by written technical direction by the TOCOR.
6b	Organize SAB and public comments about the CCL 5 Microbes process.	Within 3 weeks of TOCOR direction or as directed by written technical direction by the TOCOR.
6c	Develop and/or update Contaminant Information Sheets (CISs) for an CCL 6 nominations.	To begin November 2022 or as directed by written technical direction by the TOCOR.
6d	Evaluate data sources for CCL 6.	Within 3 weeks of TOCOR direction or as directed by written technical direction by the TOCOR.
6e	Conduct literature searches for additions to CCL 6 Microbial universe	By November 1, 2022 or as directed by written technical direction by the TOCOR.
6f	Update chapters of CCL 5 microbial contaminants support document “Technical Support Document for the Draft Fifth Contaminant Candidate List (CCL 5) - Microbial Contaminants” for CCL 6 microbial contaminants.	To begin November 2022 or as directed by written technical direction by the TOCOR.
6g	Evaluate recommendations from stakeholders regarding microbes from CCL 5 for CCL 6.	To begin September 2022 or as directed by written technical direction by the TOCOR.

**Deliverables:** Finalize remaining support document(s) and supporting files for Final CCL 5 and make 508 compliant, organize SAB and public comments about the CCL 5 Microbes. Develop any new and/or update any existing CISs for any CCL 6 nominations, evaluate data sources, evaluate recommendations from stakeholder during CCL 5, conduct literature searches for additions to CCL 6 Microbial universe.

## VI. General Requirements of the Task Order and Schedule

Work conducted under this Task Order shall not duplicate work conducted under any other Task Order or Work Assignment under any other contract.

Confidential Business Information (CBI): For this Task Order, the contractor shall not be accessing any Confidential Business Information (CBI).

Identification as Contracting Staff: To avoid the perception that contractor personnel are EPA employees, the contractor personnel shall be clearly identified as independent contractors of EPA when participating in events with outside parties and prior to the start of any meeting. The contractor personnel are prohibited from acting as the Agency's official representative. When speaking with the public, the contractor shall refer all interpretations of policy to the TOCOR.

Limitation of Contractor Activities: The contractor shall submit drafts of all deliverables to the TOCOR for review prior to submission of the final product. These drafts will clearly specify the methods, procedures, considerations, assumptions, relevant citations, data sources and data that support any conclusions and recommendations. The contractor shall incorporate all TOCOR and EPA team member comments into all final deliverables, unless otherwise agreed upon by the TOCOR or where discrepancies exist. The contractor shall adhere to all applicable EPA management control procedures as implemented by the EPA Contracting Officer (CO), Project Officer (PO), and TOCOR.

Quick Response: Under this Performance Work Statement (PWS), the contractor may be required to provide information for use by EPA for quick responses and analyses of options, issues, and policy decisions. Quick responses are those which require completion in one to five working days.

Travel: Travel is not anticipated under this Performance Work Statement (PWS).

Deliverable Formatting: All memos, draft comments, summaries and responses, chapters, and presentations are to be provided in electronic form using Word and/or Excel/Access, Power Point, or, in special cases another software program agreed to by the TOCOR. Memos are to be written in a manner which will make them easy to conform into draft chapters for the Final Report. For deliverables that are in Word or pdf versions of Word documents, that are intended to be shared with management or the public, the contractor shall use decimal align in all tables containing columns of numbers of varying digits, whether decimal places are reported or not. All final materials, e.g., memos, chapters, etc. are to be compliant with Section 508 Amendment to the Rehabilitation Act of 1973.

## VII. BASE PERIOD DELIVERABLES

All deliverables shall be in accordance with the contract level PWS, Section F.

Task	Deliverables	Due
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1	Progress and financial reports	Monthly
	Mid-monthly financial estimates	Mid-month every month until February 28, 2022
	Calls with EPA	Bi-weekly, weekly calls during periods of intense activity
2	Draft and Revised PQAPP	Within 2 weeks of TO award for the draft and within 2 weeks of receiving written comments from the TOCOR for the revised PQAPP.
3a	Provide suggestions to EPA Data Analysis Plan and Revised Data Analysis Plan (if needed)	Within 2 weeks of PQAPP approval unless TOCOR agrees to a later date and within 5 weeks of PQAPP unless TOCOR agrees to a later date
3b	Draft Data Analysis	<del>September 8, 2021 unless TOCOR agrees to a later date.</del> Interim data analysis products delivery dates directed by TOCOR.
	Final Data Analysis	Within 1 month after comments are provided by the TOCOR on any revisions.
3c	Literature review on health effects and treatment	<del>October 15, 2021 unless TOCOR agrees to a later date.</del> January 14, 2022 and January 24, 2022, respectively.
3d	<del>Revise chapters</del> Revised draft Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations, Health Effects and Treatment and References	January 31, 2022 unless TOCOR agrees to a later date—February 15, 2022 or as directed by written technical direction by the TOCOR.
3e	<del>Add documentation to Quality Assurance and Data Management document</del> Additional contractor support may be necessary as discovered during data analysis effort. For example, errors may be detected in the database or updated information could be received from a state or other entity, requiring additional work in the data. Follow up with states about gaps in data as directed by the TOCOR. Adjust data for specified analysis as directed by the TOCOR.	As needed
3f	Revise and complete diagrams for the EPA SYR4 protocol.	January 31, 2022 unless TOCOR agrees to a later date.

3g	As directed by the TOCOR, evaluate different approaches and conduct analyses based on EPA small scale pilot analyses, for example to support analyses evaluating a Ground Water Rule treatment technique. Conduct other additional analyses not captured in the preliminary data analysis plan referenced in 3a, as directed by the TOCOR. Create interim data analyses, summary and synthesis products for SYR4 workgroup review.	Within 3 weeks after clarification received from TOCOR or as directed by written technical direction by the TOCOR.
3h	Recreate Markov chain Monte Carlo modelling and Bayesian statistics (used for SYR3 data) and evaluate for SYR4 ICR data for occurrence of Total Coliform and/or E. Coli in undisinfected ground water systems (using year(s) determined by TOCOR) and provide write-up.	Within 3 weeks after clarification received from TOCOR, or as directed by written technical direction by the TOCOR.
4a	Support for response to comments received from FRN draft CCL 5	Within 1 month after comments are received
4b	Draft support documents and supporting files	Within two months of the TO award
	Final support documents and supporting files	Within 1 month after comments are provided by the TOCOR on revised draft support document.

#### VIII. OPTION 1 PERIOD DELIVERABLES

Task	Deliverable	Due Date
5a	Draft 1: Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations.	Within 2 weeks after comments are provided by the TOCOR on revised draft support document or as directed by written technical direction by the TOCOR.
	Draft 2: Updated Six-Year Review 4	Within 1 month after workgroup input is received or as directed by written technical direction by the TOCOR.

	<p>Technical Support Document for Microbial Contaminant Regulations prior to management briefings</p> <p>Draft 3: Updated Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations after management briefings.</p> <p>Create a 508 compliant version of the Six Year Review 4 Technical Support Document for Microbial Contaminant Regulations.</p>	<p>Within 1 month after management input has been received or as directed by written technical direction by the TOCOR.</p> <p>Within 2 weeks after materials are finalized or as directed by written technical direction by the TOCOR.</p>
5b	<p>Revise analyses before and after workgroup and management briefings and meetings.</p> <p>Finalize analyses and provide summary document with results</p>	<p>Within 2 weeks of management and/or workgroup feedback, or as directed by written technical direction by the TOCOR.</p> <p>Within 2 weeks after receipt of final TOCOR feedback, or as directed by written technical direction by the TOCOR.</p>
5c	<p>Last minute changes or updates to QA Data Management document, protocol diagrams.</p>	<p>As needed and directed by the TOCOR or as directed by written technical direction by the TOCOR.</p>
5d	<p>Develop a draft and final Health Effects section for Fluoride in the SYR4 chemical support document (using EPA input on Health and occurrence).</p> <p>Develop final document and compile references</p>	<p>Within 2 months or as directed by written technical direction by the TOCOR.</p> <p>Within 2 weeks or as directed by written technical direction by the TOCOR.</p>
5e	<p>Create briefing material, presentations, tables, including one-time use tables (as needed)</p>	<p>Within a week or as directed by written technical direction by the TOCOR.</p>
5f	<p>Complete any analyses and/or items not completed in the base period from Tasks 3b, 3g, and 3h.</p>	<p>Within a week or as directed by written technical direction by the TOCOR.</p>

5g	Conduct any additional literature reviews, if needed, for health effects and treatment.	Within a week or as directed by written technical direction by the TOCOR.
6a	Finalize remaining support documents and supporting files for Final CCL 5 (508 compliant)	Within 2 weeks after comments are provided by the TOCOR on revised draft support document and supporting files or as directed by written technical direction by the TOCOR.
6b	Organize SAB and public comments about the CCL 5 Microbes process.	Within 3 weeks of TOCOR direction or as directed by written technical direction by the TOCOR.
6c	Develop and/or update Contaminant Information Sheets (CISs) for an CCL 6 nominations.	To begin November 2022 or as directed by written technical direction by the TOCOR.
6d	Evaluate data sources for CCL 6	Within 3 weeks of TOCOR direction or as directed by written technical direction by the TOCOR.
6e	Conduct literature searches for additions to CCL 6 Microbial universe	By November 1, 2022 or as directed by written technical direction by the TOCOR.
6f	Update chapters of CCL 5 microbial contaminants support document "Technical Support Document for the Draft Fifth Contaminant Candidate List (CCL 5) - Microbial Contaminants" for CCL 6 microbial contaminants.	To begin November 2022 or as directed by written technical direction by the TOCOR.
6g	Evaluate recommendations from stakeholders regarding microbes from CCL 5 for CCL 6.	To begin September 2022 or as directed by written technical direction by the TOCOR.

## **SECTION B - Supplies or Services/Prices**

### **B-1 Local Clauses EPA-B-32-103 LIMITATION OF GOVERNMENT'S OBLIGATION**

- (a) Severable services may be incrementally funded. Non-severable services shall not be incrementally funded. Contract line item 0001 is severable and may be incrementally funded. For this item, the sum of \$155,346.00 of the total price is presently available for payment and allotted to this item. Contract line item 0002 is severable and may be incrementally funded. For this item, the sum of \$130,000.00 of the total price is presently available for payment and allotted to this item.
- (b) For items identified in paragraph (a) of this clause, the Contractor agrees to perform up to the point at which the total amount payable by the Government, including reimbursement in the event of termination of those items for the Government's convenience, approximates the total amount currently allotted for those items to the contract. The Contractor shall not continue work on those items beyond that point. Subject to the clause entitled "Termination for Convenience of the Government," the Government will not be obligated, under any circumstances, to reimburse the Contractor in excess of the amount payable by the Government in the event of the termination of applicable contract line items for convenience including costs, profit, and estimated termination costs for those line items.
- (c) Notwithstanding the dates specified in the allotment schedule in paragraph (h) of this clause, the Contractor will notify the Contracting Officer, in writing, at least 10 days prior to the date when, in the Contractor's best judgment, the work will reach the point at which the total amount payable by the Government, including any cost for termination for convenience, will approximate 85 percent of the total amount currently allotted to the contract for performance of the applicable items. The notification will state (1) the estimated date when that point will be reached and (2) an estimate of additional funding, if any, needed to continue performance of the applicable line items up to the next scheduled date for the allotment of funds identified in paragraph (a) of this clause, or to a substitute date as determined by the Government pursuant to paragraph (d) of this clause. If, after such notification, additional funds are not allotted by the date identified in the Contractor's notification, or by an agreed substitute date, the Contracting Officer will terminate any item(s) for which additional funds have not been allotted, pursuant to the clause entitled "Termination for Convenience of the Government."
- (d) The parties contemplate that, subject to the availability of appropriations, the Government may allot additional funds for continued performance of the contract line items identified in paragraph (a) of this clause and will determine the estimated period of contract performance which will be covered by the funds. If additional funds are allotted, the Contracting Officer will notify the Contractor in writing. The Contractor shall not resume performance of the contract line items identified in paragraph (a) until the written notice is received. The provisions of paragraphs (b) through (d) of this clause will apply in like manner to the additional allotted funds and to the new estimated period of contract performance. The contract will be modified accordingly.
- (e) The Government may, at any time prior to termination, allot additional funds for the performance of the contract line items identified in paragraph (a) of this clause.
- (f) The termination provisions of this clause do not limit the rights of the Government under the clause entitled "Default". The provisions of this clause are limited to the work and allotment of funds for the contract line items set forth in paragraph (a) of this clause. This clause no longer applies once the contract is fully funded.
- (g) Nothing in this clause affects the right of the Government to otherwise terminate this contract pursuant to the contract clause entitled "Termination for Convenience of the Government".
- (h) The parties contemplate that the Government may obligate funds to this contract in accordance with the following schedule:

RECAPITULATION:

**RECAPITULATION OF FUNDING TO DATE**  
**CONTRACT NO. 68HERC21D0006**  
**TASK ORDER NO. 68HERC21F0168 – Amend 2**

**Base Period of Performance - From 04/08/2021 through 02/28/2022**

**Option Period 1 Period of Performance – From 03/01/2022 through 02/28/2023**

<b>FUNDING ACTION</b>	<b>FUNDING</b>
<b>Total Line 0001 Amount</b>	<b>\$169,017</b>
<b>Initial Funding</b>	<b>\$100,000</b>
<b>Incremental Funding (P00001)</b>	<b>\$50,137</b>
<b>Incremental Funding (P00003)</b>	<b>\$18,880</b>
<b>Line Item 0001</b> <b>T&amp;M Ceiling Value Decrease</b> <b>-\$13,671.00</b> <b>(P00004)</b>	
<b>Revised Line Item 0001 Total (P00004)</b>	<b>\$155,346</b>
<b>Balance Unfunded</b>	<b>\$0.00</b>
<b>Total Line 0002 Amount</b> <b>(Increased by P00004)</b>	<b>\$148,079</b>
<b>Initial Funding</b> <b>(P00004)</b>	<b>\$130,000</b>
<b>Balance Unfunded</b>	<b>\$18,079</b>

## **SECTION F - Deliveries or Performance**

### **F-1 Local Clauses EPA-F-12-101 PERIOD OF PERFORMANCE**

The period of performance of this Task Order period (Base Period) shall be from 04/08/2021 through 02/28/2022 inclusive of all required reports.

The period of performance of Option Period 1 shall be from 03/01/2022 through 02/28/2023 inclusive of all required reports.

## **SECTION G - Contract Administration Data**

### **G-1 Local Clauses EPA-G-42-101 CONTRACT ADMINISTRATION REPRESENTATIVES**

Task Order-Level Contracting Officers Representatives (CORs)/Project Officers for this contract are as follows:

Nicole Tucker, 202-564-1946, email: tucker.nicole@epa.gov (TOCOR)

Jini Mohanty, 202-564-5269, email: mohanty.jini@epa.gov (Alternate TOCOR)

Contracting Officials responsible for administering this contract are as follows:

Keith Pfeffer, 513-487-2034, pfeffer.keith@epa.gov (Contracting Officer)

John Krauss, 513-487-2148, krauss.john@epa.gov (Contract Specialist)

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>				1. CONTRACT ID CODE		PAGE OF PAGES	
						1 3	
2. AMENDMENT/MODIFICATION NO.		3. EFFECTIVE DATE		4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO. (If applicable)	
P00005		See Block 16C		PR-OW-22-00446			
6. ISSUED BY		CODE		7. ADMINISTERED BY (If other than Item 6)		CODE	
CAD							
US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: W136 Cincinnati OH 45268-0001							
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)				(x)			
Cadmus Group LLC, The Attn: JING HOFFMANN 100 5TH AVENUE SUITE 100 WALTHAM MA 024518727							
				9A. AMENDMENT OF SOLICITATION NO.			
				9B. DATED (SEE ITEM 11)			
				x			
				10A. MODIFICATION OF CONTRACT/ORDER NO.			
				68HERC21D0006			
				68HERC21F0168			
				10B. DATED (SEE ITEM 13)			
				04/08/2021			
CODE WSEZME8NNBA8		FACILITY CODE					
<b>11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS</b>							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended. <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or electronic communication which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by letter or electronic communication, provided each letter or electronic communication makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required)				Net Increase:		\$85,000.00	
See Schedule							
<b>13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.</b>							
CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.						
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).						
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:						
X	D. OTHER (Specify type of modification and authority) Clause B-1 EPA-B-32-103; Mutual Agreement Between Both Parties						
<b>E. IMPORTANT:</b> Contractor <input checked="" type="checkbox"/> is not <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)							
UEI: WSEZME8NNBA8							
TOCOR: NICOLE TUCKER Invoice Approver: Nicole Tucker Alt Invoice App: Jini Mohanty							
The purposes of this modification are to:							
1) Amend the Performance Work Statement (PWS), as attached;							
2) Increase the time-and-materials ceiling value of Option Period 1 (Item 0002) FROM \$148,079.00 TO \$264,133.00 as a result of the attached amended PWS;							
3) Add \$85,000.00 in incremental funding to Option Period 1 (Item 0002); and							
Continued ...							
Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)			
				Keith Pfeffer			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA		16C. DATE SIGNED	
				 ELECTRONIC SIGNATURE (Signature of Contracting Officer)		06/01/2022	
(Signature of person authorized to sign)							

<b>CONTINUATION SHEET</b>	REFERENCE NO. OF DOCUMENT BEING CONTINUED 68HERC21D0006/68HERC21F0168/P00005	PAGE	OF
		2	3

NAME OF OFFEROR OR CONTRACTOR  
Cadmus Group LLC, The

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>4) Establish Option Period 2 (Item 0003), with a time-and-materials ceiling value of \$105,947.00, and a period of performance from March 1, 2023 through June 30, 2023. At this time, Option Period 2 remains UNEXERCISED.</p> <p>See below and the attached Funding Recap sheet for Item 0002.</p> <p>LIST OF CHANGES:</p> <p>Obligated Amount for this Modification: \$85,000.00</p> <p>CHANGES FOR LINE ITEM NUMBER: 2 Total Amount changed from \$148,079.00 to \$264,133.00 Obligated Amount for this Modification: \$85,000.00 Incremental Funded Amount changed from \$130,000.00 to \$215,000.00</p> <p>NEW ACCOUNTING CODE ADDED: Account code: 22-23-B-40DF-000B53-2505-2240SRE018-001 Beginning FiscalYear 22 Ending Fiscal Year 23 Fund (Appropriation) B Budget Organization 40DF Program (PRC) 000B53 Budget (BOC) 2505 Job # (Site/Project) Cost Organization DCN-LineID 2240SRE018-001 Quantity: 0 Amount: \$85,000.00</p> <p>Payment: RTP Finance Center US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts Durham NC 27711 Period of Performance: 04/08/2021 to 06/30/2023</p> <p>Continued ...</p>				

NAME OF OFFEROR OR CONTRACTOR  
Cadmus Group LLC, The

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
0003	Option Period 2 (Option Line Item) 12/15/2022 Product/Service Code: R499				105,947.00

**Performance Work Statement**  
**Contract 68HERC21D0006**  
**Task Order Tracking Number: 68HERC21F0168 – Amendment 3**

**I. Title: Support for Six-Year Review 4 and Development of CCL 5 Microbes**

**II. Estimated Period of Performance:**

Base Year: Date of Award through February 28, 2022

Option Year 1: March 1, 2022 to Feb 28, 2023

Option Period 2: March 1, 2023 to June 30, 2023

**III. Key EPA Personnel:**

**Task Order Contracting Officer's Representative and Technical Expert (TOCOR):**

Name: Nicole Tucker  
Office: OW/OGWDW  
Standards and Risk Management Division  
Address: US EPA, 1200 Pennsylvania Ave, NW  
(4607M) Washington, DC 20460  
Location: 2209F  
Telephone #: 202-564-1946  
Email: tucker.nicole@epa.gov

**Alternate Task Order Contracting Officer's Representative and Technical Expert (ALT-TOCOR):**

Name: Pritidhara (Jini) Mohanty  
Office: OW/OGWDW  
Address: Standards and Risk Management  
Division  
US EPA, 1200 Pennsylvania Ave,  
NW (4607M)  
Location: Washington, DC 20460  
2209S  
Telephone #: 202-564-5269  
Email: mohanty.jini@epa.gov

**IV. BACKGROUND AND PURPOSE**

The 1996 Amendments to the Safe Drinking Water Act (SDWA) requires the U.S. Environmental Protection Agency (EPA) to review its existing drinking water regulations every six years. Section 1412(b)(9) of the SDWA states "The administrator shall, not less often than every 6 years, review and revise, as appropriate, each national primary drinking water regulation (NPDWR) promulgated under this title. Any revision of a national primary drinking water regulation shall be promulgated in accordance with this section, except that each revision shall maintain, or provide for greater, protection of the health of persons."

Since the 1996 SDWA Amendments were enacted, EPA has completed three comprehensive reviews of existing NPDWRs: Six-Year Review 1 (completed in July 2003), Six-Year Review 2 (completed in March 2010) and Six-Year Review 3 (completed in December 2016). EPA is currently in its fourth Six-Year Review process (SYR 4).

As part of the SYR process, EPA assesses and analyzes new data/information regarding health effects, occurrence, treatment, and analytical methods to evaluate whether there are new or additional ways to estimate and manage risk that will maintain or strengthen public health protection. Potential outputs from the SYR 4 review will include summary documents on health effects, occurrence, treatment, and implementation, as well as other documents to support the SYR decision-making.

Compliance monitoring data and treatment technique information are key components in the SYR process. Through the Information Collection Request (ICR) process, the Agency facilitates data sharing from States in order to obtain comprehensive nationally representative occurrence data. As was done with previous Six-Year Review, EPA requested voluntary submission of its compliance monitoring data and treatment technique information for all regulated chemical, radiological, and microbiological contaminants. The Office of Management and Budget (OMB) approved the ICR for the EPA's fourth Six-Year Review under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 et seq., and assigned the OMB control number 2040-0298.

Following data collection and quality assurance procedures, EPA will conduct an occurrence analysis using data obtained from states through the ICR. The result of this effort will provide EPA with up-to-date data to form a statistically valid sample of regulated contaminant occurrence in water supply systems throughout the nation. EPA follows a protocol for Six-Year Review. The protocol can guide analysis and includes a regulatory review decision tree contains branches with a series of sequential questions that inform a decision about the appropriateness of revising an NPDWR.

Under this task order, EPA is seeking support for its effort pertaining to the microbial rules and the chemical contaminant fluoride that EPA expects to review for SYR 4. The SYR 4 will assess new data/information related to microbial contaminants regulated under the Revised Total Coliform Rule (RTCR), Long Term 2 Enhanced Surface Water Treatment Rule (LT2), Groundwater Rule (GWR), and Aircraft Drinking Water Rule (ADWR). In addition will develop supporting material for the chemical contaminant fluoride. EPA anticipates completing the SYR 4 in early 2023.

The 1996 SDWA Amendments also require EPA to publish a list of contaminants that are known or anticipated to occur in public water systems, and which may require regulation under the SDWA, known as the Drinking Water Contaminant Candidate List, or CCL. (Section 1412(b)(1)). The drinking water CCL is a list of contaminants that are currently not subject to any proposed or promulgated NPDWRs but are known or anticipated to occur in public water systems. Contaminants listed on the CCL may require future regulation under the SDWA. The SDWA directs the Agency to consider the health effects and occurrence information for unregulated contaminants as the Agency makes decisions to place contaminants on the list. SDWA further specifies that the Agency place those contaminants on the list that present the greatest public health concern related to exposure from drinking water. EPA uses the CCL to identify priority contaminants for regulatory decision making and information collection. EPA is currently developing the draft CCL 5. EPA anticipates to complete CCL 5 in 2022.

Under this task order, the contractor shall support EPA's effort to evaluate the existing NPDWRs for effectiveness of public health protection through the Six Year Review process. In addition, this task order

shall support EPA in continuing the process of developing a draft and final microbial candidate contaminant list for EPA's CCL process.

## V. TASKS

The tasks below provide the contractor with a description of the expected deliverables and time frames. All tasks/work that is labeled as **OPTIONAL** are currently optional tasks for the contractor to perform and shall only be completed following receipt of written Technical Direction by the EPA TOCOR to proceed.

### Task 1. Monthly progress reports and administration

Reports of Work, the contractor shall provide electronic copies of the monthly progress and financial reports to the Contracting Officer, EPA Contract Level COR (CL-COR) (previously titled Project Officer (PO)) and TOCOR. Each progress report shall describe the technical work and expenditures for the same time period as the corresponding invoice. The reports shall list by task the amount of work completed and include a table of hours by personnel for each task. The reports also shall identify any problems or difficulties, lessons learned, Quality Assurance (QA)/Quality Control (QC) activities, and next steps.

Within ten (10) days of task order award, the contractor shall schedule a conference call with the TOCOR to clarify outstanding questions and confirm the schedule and specific tasks.

The contractor shall provide status updates to the TOCOR by conference call periodically (approximately biweekly or more frequently if necessary) to discuss progress, challenges, and decisions regarding next steps.

The contractor shall immediately notify the EPA TOCOR by telephone of any problems that may impede performance, impact QA-related activities, and any corrective actions needed to solve the problems. The contractor shall also include this in the Monthly Technical and Cost Progress Reports.

**The contractor shall notify the EPA TOCOR when the budget has reached the threshold of 70 percent of spending for this TO's Option Period 1.**

**Deliverables and schedule under Task 1:** The contractor shall provide monthly progress and financial reports and periodic calls with the EPA. The contractor shall also provide mid-month spending estimates.

#### Deliverables and schedule under Task 1

Task	Deliverable	Due
1	Progress and financial reports	Monthly after receiving TO award
	Mid-monthly financial estimates	Mid-month every month until February 28, 2022
	Calls with EPA	Bi-weekly after receiving TO award including weekly calls during periods of significant activity

### Task 2. Quality assurance/quality control

Quality Assurance is an important component of EPA's work to assure that environmental information is appropriate for its intended use. This Task Order (TO) does not require the contractor to collect or obtain

field samples. Tasks 4 will require the contractor the use of secondary data. Therefore, consistent with the Agency's quality assurance (QA) requirements, the contractor shall develop a project-specific quality assurance project plan (PQAPP) to assure that sound quality of the secondary data is used for these tasks. In addition, throughout the course of this call order, if it is determined the PQAPP requires revision, the contractor will provide necessary changes to the TOCOR.

**Deliverables and schedule under Task 2:** The contractor shall provide a PQAPP describing the use of secondary environmental data management within two weeks of award, and a revised PQAPP (if needed) within one week of receiving written comments from the TOCOR.

**Deliverables and schedule under Task 2**

<b>Task</b>	<b>Deliverables</b>	<b>Due</b>
2a	Draft PQAPP	Within 2 weeks of TO award
2b	Revised PQAPP (if needed)	Within 2 weeks of receiving comments from TOCOR

**Task 3: Six-Year Review 4 Support- Base period**

The compliance monitoring and treatment techniques records collected under the SYR 4 ICR provide the data needed to conduct statistical estimates of national occurrence for regulated contaminants and to evaluate treatment technique information associated with the control of pathogens, disinfectants, and disinfection byproducts. The national occurrence estimates and information on treatment techniques will support the SDWA mandate that requires the EPA to review the existing NPDWRs and determine whether revisions are appropriate.

The contractor shall support EPA with occurrence analyses, reports, and support documents on microbial occurrence data using the SYR 4 ICR compliance monitoring and treatment technique data, as well as other supplemental occurrence data sources.

After consulting with the TOCOR, the contractor shall execute the following tasks:

- Task 3a. Review EPA's draft preliminary data analysis plan, suggest improvements that support analysis objectives, and modify the plan, as appropriate.
- Task 3b. Conduct, record, and report occurrence analyses of the microbial data to support the review of the Revised Total Coliform Rule (RTCR), Ground water Rule (GWR), Long-term 2 Enhanced Surface Water Treatment Rule (LT2), and the Aircraft Drinking Water Rule (ADWR). Currently anticipated analyses are described as: Derive and report detailed estimates of national occurrence of these microbial contaminants. Analysis will consist of: positive counts of Total Coliform (TC), *E. coli* (EC), fecal coliforms, Coliphage, *Enterococci*, *Cryptosporidium*, recorded by raw or finished water sample, source water type (ground water or surface water), system type (community water system, transient non-community water systems, and non-transient non-community water systems), disinfectant type (chlorine or chloramines) and system size (less than 100, 101-200, 501-1,000, 1001-4100, 4101-33,00, 33,001-100,000, more than 100,00) from the SYR 4 ICR dataset for data collected in years 2012-2019. Conduct similar analyses for TC, EC and other data provided by EPA from ADWR. Analyses are not limited to those described in this

task to support decision making under SYR4. Further analyses will be described in the data analysis plan described in Task 3a and by TOCOR. Past occurrence analyses for regulated microbial contaminants can be found in the EPA SYR 3 support document

[“Six-Year Review 3 Technical Support Document for Microbial Contaminant](#)

[Regulations,”](#) and the “Six-Year Review 3 Technical Support Document for Long-Term 2 Enhanced Surface Water Treatment Rule.”

The contractor shall create interim data analyses, summary and synthesis products for SYR4 team and workgroup review.

- Task 3c. Conduct a literature review on health effects and treatment (e.g., evaluating the efficacy of Treatment Technique on disinfecting microbials).
- Task 3d. Based on the results of Tasks 3a to 3c, develop updated drafts of chapters (from Six Year Review 3) of technical support document “*Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations*” anticipated to include:
  - o History of microbial regulations
  - o Health effects
  - o Treatment
  - o ReferencesBegin the final draft after receiving EPA comments/edits.
- Task 3e. While the review, editing, and formatting of the states database will have been substantially completed previously, additional contractor support may be necessary as discovered during data analysis effort. For example, errors may be detected in the database or updated information could be received from a state or other entity, requiring additional work in the data. Follow up with states about gaps in data as directed by the TOCOR. Adjust data for specified analysis as directed by the TOCOR.
- Task 3f. Revise and complete diagrams for the EPA SYR4 protocol for EPA’s Protocol SYR4 support document.
- Task 3g. As directed by the TOCOR, evaluate different approaches and conduct analyses based on EPA small scale pilot analyses, for example to support analyses evaluating a Ground Water Rule treatment technique. Conduct other additional analyses not captured in the preliminary data analysis plan referenced in 3a, as directed by the TOCOR. Create interim data analyses products, summary and synthesis products for SYR4 team and workgroup review.
- Task 3h. Recreate Markov chain Monte Carlo modelling and Bayesian statistics (used for SYR3 data) and evaluate for SYR4 ICR data for occurrence of Total Coliform and/or *E. Coli* in undisinfected ground water systems (using year(s) determined by TOCOR) and provide write-up.

**Deliverables:** The contractor shall provide support for the data analysis plan by reviewing EPA’s draft analysis plan and providing improvements that support analysis objectives, and modify the plan, as appropriate. The contractor shall conduct occurrence analyses on specified microbial rules as directed by the TOCOR. In addition, the contractor shall conduct exploratory analyses on specified microbial rule(s) with the direction of the TOCOR. The contractor shall also perform a literature search on health effects on specified microbes. Based on the results of Tasks 3a to 3c, develop updated drafts of chapters (from Six Year Review 3) technical support document “Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations” anticipated to include: History of microbial regulations, Health effects, Treatment, and References. The contractor shall also revise and complete diagrams for the EPA SYR4 protocol for EPA’s Protocol SYR4 support document. Evaluate different approaches and conduct analyses based on EPA small scale pilot analyses, for example to support analyses evaluating a Ground Water Rule treatment technique (as directed by the TOCOR). Conduct other additional analyses not captured in the preliminary data analysis plan

referenced in 3a, as directed by the TOCOR. Create interim data analyses products, summary and synthesis products for SYR4 team and workgroup review. Recreate Markov chain Monte Carlo modelling and Bayesian statistics (used for SYR3 data) and evaluate for SYR4 ICR data for occurrence of Total Coliform and/or E. coli in undisinfected ground water systems (using year(s) determined by TOCOR) and provide write-up.

**Deliverables and schedule under Task 3**

<b>Task</b>	<b>Deliverables</b>	<b>Due Date</b>
3a	Provide suggestions to EPA Data Analysis Plan	Within 2 weeks of PQAPP approval unless TOCOR agrees to a later date
	Revise Data Analysis Plan (if needed)	Within 4 weeks of PQAPP unless TOCOR agrees to a later date
3b	Draft Data Analysis	Interim data analysis products delivery dates directed by TOCOR-
	Final Data Analysis	Within 1 month after comments are provided by the TOCOR on any revisions.
3c	Literature review on health effects and treatment	January 14, 2022 and January 24, 2022, respectively.
3d	Revised draft chapters of Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations: History of Microbial Regulations, Health Effects and Treatment and References	February 15, 2022 or as directed by written technical direction by the TOCOR.
3e	Additional contractor support may be necessary as discovered during data analysis effort. For example, errors may be detected in the database or updated information could be received from a state or other entity, requiring additional work in the data. Follow up with states about gaps in data as directed by the TOCOR. Adjust data for specified analysis as directed by the TOCOR.	As needed

3f	Revise and complete diagrams for the EPA SYR4 protocol.	January 31, 2022 unless TOCOR agrees to a later date.
3g	As directed by the TOCOR, evaluate different approaches and conduct analyses based on EPA small scale pilot analyses, for example to support analyses evaluating a Ground Water Rule treatment technique. Conduct other additional analyses not captured in the preliminary data analysis plan referenced in 3a, as directed by the TOCOR. Create interim data analyses, summary and synthesis products for SYR4 workgroup review.	Within 3 weeks after clarification received from TOCOR or as directed by written technical direction by the TOCOR.
3h	Recreate Markov chain Monte Carlo modelling and Bayesian statistics (used for SYR3 data) and evaluate for SYR4 ICR data for occurrence of Total Coliform and/or E. Coli in undisinfected ground water systems (using year(s) determined by TOCOR) and provide write-up.	Within 3 weeks after clarification received from TOCOR, or as directed by written technical direction by the TOCOR.

#### **Task 4. Microbial Contaminant Candidate List 5 -Base period**

After consulting with the TOCOR, the contractor shall support EPA in compiling and categorizing public comments (regarding the microbial contaminants) associated with Federal Register Notice for the draft CCL 5 and finalizing the CCL 5 Microbial Support document by addressing comments and revisions requested in the support document from EPA management review, Science Advisory Board comments, and a public comment period. The comments are expected to be of a scientific and technical nature related to microbial health effects and occurrence. The final CCL Microbial Support document, with the revisions included and comments addressed, shall not exceed 300 pages in total (the current draft is approximately 226 pages). The contractor shall update or revise any additional supporting files as needed including if the comments received require it (e.g., Excel spreadsheets, Contaminant Information Sheets (CIS), Microsoft word documents) and support development of a comment response document. EPA estimates up to 8-10 additional support materials may need revision (most needing no more than 5 pages each, with the

comment response support estimated 20 pages dependent upon the amount of comments received). The contractor shall support EPA in making the Microbial support document 508 compliant.

**Deliverables:** The contractor shall provide draft and final clean and track changes versions of the CCL 5 Microbial Support Document of an estimated 260-300 pages, plus an estimated 8-10 supporting files.

**Deliverables and schedule under Task 4**

<b>Task</b>	<b>Deliverable</b>	<b>Due Date</b>
4a	Support for response to comments from FRN draft CCL 5	Within 1 month of comments received
4b	Draft support documents and supporting files	Within two months of the TO award
	Finalize support documents and supporting files	Within 1 month after comments are provided by the TOCOR on revised draft support document.

**Task 5- Support for Six Year 4-Option Period 1**

Under Task 5, the contractor shall continue to update the draft technical support document entitled Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations” and to produce a final document under this task. Under Task 5, the contractor shall support any revisions to occurrence analyses, reports, or write-ups under this Task, as needed and directed by the TOCOR.

- Task 5a. Based on the results of Tasks 3a to 3d, develop drafts and a final updated (from Six-Year Review 3) technical support document “*Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations*”. Develop drafts and final versions of this document, revising depending on workgroup and management feedback to include:
  - History of microbial regulations
  - Health effects
  - Occurrence and exposure
  - Treatment
  - References
  - Combine all chapters and sections into one document.
  - Provide table of contents, correct acronyms, correct appendices, consistent style and format of citations and references (and be consistent with all other SYR4 documents).
  - Provide any necessary formatting of the document for consistency throughout the document, and consistency with other SYR documents.
- Task 5b. Prepare summary of analyses conducted under task 3a to 3c under this PWS prior to Workgroup discussions on analytical results. As needed, revise analyses and prepare new summaries based on workgroup feedback. Revise analyses and prepare new summaries before and after management and senior management briefings. Finalize analyses and provide summary document with results. Provide documentation with each analysis deliverable to include data source, data element definition, description of methodology, etc.
- Task 5c. If necessary, and as directed by the TOCOR, make any changes or updates to the QA Data Management document and/or protocol diagrams.

- Task 5d. Develop a draft and final Health Effects section for Fluoride in the SYR4 chemical support document (using EPA input on Health and occurrence). Conduct literature review including updating history/events regarding fluoride in drinking water since 2016 (e.g., CDC changing point level of 0.7mg/L versus range for fluoridation). Add EPA's fluoride health effects findings and references to chemicals health effects support document.
- Task 5e. Create briefing material, presentations, tables, including one-time use tables (as needed) e.g., Support the development of option selection briefing materials
- Task 5f. Complete any analyses and/or items not completed in the base period from Tasks 3b, 3f, and 3g.
- Task 5g. Conduct any additional literature reviews if needed for health effects and treatment.
- Task 5h. (Optional) As needed, conduct Markov chain Monte Carlo modelling and Bayesian statistics (as was used for SYR3 data) and evaluate for SYR4 ICR data for occurrence of Total Coliform and/or E. Coli for all PWS or subsets, for all years (2011-2019) as directed by the TOCOR, and provide tables, graphs, annotations with interpretations of modeling.
- Task 5i. (Optional) Prepare SYR4 ICR files for data posting to EPA's SYR4 website and prepare associated metadata. Prepare files in phases, starting with DBP SYR4 ICR files. Develop necessary user guides as required for posting data on EPA's website.
- Task 5j. (Optional) Editorial and technical reviews of edits of SYR4 FRN.
- Task 5k. (Optional) Resolving data analysis design issues, including understanding data elements.
- Task 5l. (Optional) Support the development of SYR4 communication materials (e.g., comm one-pager, fact sheet, etc.)
- Task 5m. (Optional) Support with SYR4 docket (e.g., pulling and uploading references, etc.)
- Task 5n. (Optional) Support in workgroup meetings e.g., taking notes and capturing workgroup members' feedback
- Task 5o. (Optional) Develop a SYR4 ICR DBP QA document and user guide.
- Task 5p. (Optional) Update the SY Protocol document and/or the SY Protocol diagrams for SYR4.

### Deliverables and schedule under Task 5

Task	Deliverable	Due Date
5a	<p>Draft 1: Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations.</p> <p>Draft 2: Updated Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations prior to management briefings</p> <p>Draft 3: Updated Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations after management briefings.</p> <p>Create a 508 compliant version of the Six Year Review 4 Technical Support Document for Microbial Contaminant Regulations.</p>	<p>Within 2 weeks after comments are provided by the TOCOR on revised draft support document or as directed by written technical direction by the TOCOR.</p> <p>Within 1 month after workgroup input is received or as directed by written technical direction by the TOCOR.</p> <p>Within 1 month after management input has been received or as directed by written technical direction by the TOCOR.</p> <p>Within 2 weeks after materials are finalized or as directed by written technical direction by the TOCOR.</p>
5b	<p>Revise analyses before and after workgroup and management briefings and meetings.</p> <p>Finalize analyses and provide summary document with results</p>	<p>Within 2 weeks of management and/or workgroup feedback, or as directed by written technical direction by the TOCOR.</p> <p>Within 2 weeks after receipt of final TOCOR feedback, or as directed by written technical direction by the TOCOR.</p>
5c	As needed, changes or updates to QA Data Management document and/or protocol diagrams.	Within 2 weeks after request from TOCOR.
5d	Develop a draft and final Health Effects section for Fluoride in the SYR4 chemical support document (using EPA input on Health and occurrence).	Within 2 months of TO award, or as directed by written technical direction by the TOCOR.

	Develop final Health Effects section for Fluoride document and compile associated references	Within 2 weeks of receipt of final TOCOR feedback, or as directed by written technical direction by the TOCOR.
5e	Create briefing material, presentations, tables, including one-time use tables (as needed)	Within a week after request from TOCOR or as directed by written technical direction by the TOCOR.
5f	Complete any analyses and/or items not completed in the base period from Tasks 3b, 3g, and 3h.	Within a week after request from TOCOR or as directed by written technical direction by the TOCOR.
5g	Conduct any additional literature reviews, if needed, for health effects and treatment.	Within a week after request from TOCOR or as directed by written technical direction by the TOCOR.
5h <b>Optional</b>	As necessary, conduct Markov chain Monte Carlo modelling and Bayesian statistics (used for SYR3 data) and evaluate for SYR4 ICR data for occurrence of Total Coliform and/or E. Coli for all PWS or subsets for all years (2011-2019) as directed by the TOCOR, and provide tables, graphs, annotations with interpretations of modeling.	Per written technical direction by the TOCOR.
5i <b>Optional</b>	<p>Prepare SYR4 ICR files for data posting to EPA's SYR4 website and prepare associated metadata and user guides. Prepare files in phases, with the first phase being DBP SYR4 ICR files.</p> <ul style="list-style-type: none"> <li>• Develop an excel spreadsheet of SYR4 ICR MDBP contaminants files to be posted on the SYR4 website.</li> <li>• Provide summary information to be included in spreadsheet: record count before QA, record count after QA, the level of QA/QC associated with the data described, comments (e.g., what data is/isn't included, only includes SDWIS/states, non-</li> </ul>	Per written technical direction by the TOCOR.

	<p>SDWIS state data not in an acceptable format, limited effort to resolve flags, how large the total would be, data provided from these states not captured in SQL DB, how the file would need to be divided to be accessible in excel).</p> <p>Then, as directed by TOCOR prepare files for data posting and with associated metadata.</p>	
5j <b>Optional</b>	<p>Provide an editorial and technical review of the draft of the FRN for Six-Year Review 4, using Track Changes. The editing will include the following considerations: spelling, grammar, internal consistency, cross-referencing within the document, consistent style for reference citations, accurate and complete references, complete proper sequencing of reference citations and footnotes, complete and accurate list of acronyms, and consistency in table headings.</p>	Per written technical direction by the TOCOR.
5k <b>Optional</b>	<p>Resolving data analysis design issues, including understanding data elements.</p>	Per written technical direction by the TOCOR.
5L <b>Optional</b>	<p>Support the development of SYR4 communication materials (e.g., comm one-pager, fact sheet, etc.)</p>	Per written technical direction by the TOCOR.
5m <b>Optional</b>	<p>Support with SYR4 docket (e.g., pulling and uploading references, etc.)</p>	Per written technical direction by the TOCOR.
5n <b>Optional</b>	<p>Support in workgroup meetings e.g., taking notes and capturing workgroup members feedback</p>	Per written technical direction by the TOCOR.

5o <b>Optional</b>	DBP QA documentation and user guide for early release	Per written technical direction by the TOCOR.
5p <b>Optional</b>	Format and update (as necessary) the Protocol Document and/or the protocol diagrams for SYR4.	Per written technical direction by the TOCOR.

**Deliverables:** Updated versions and ultimately a final version of analyses and the SYR4 technical support document “Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations” (including making a 508 compliant version), a draft and final Health Effects section for Fluoride to be added to the SYR4 chemical support document (using EPA input on Health and occurrence), create briefing material, presentations, tables, including one-time use tables (as needed). Complete any analyses and/or items not completed in the base period from Tasks 3b, 3g, and 3h. Conduct any additional literature reviews if needed for health effects and treatment (as needed). Update the QA Data Management Document and/or protocol document (as needed). **Optional tasks include:** resolving data analysis design issues, including understanding data elements, support the development of SYR4 communication materials, support with SYR4 docket, and support in workgroup meetings, as necessary, conduct Markov chain Monte Carlo modelling and Bayesian statistics for all PWSs, prepare SYR4 ICR files for data posting to EPA’s SYR4 website and prepare associated metadata, provide an editorial and technical review of the draft of the FRN, develop an DBP QA documentation/user guide, format and update (as necessary) the Six Year Protocol Document and/or the protocol diagrams for SYR4

#### **Task 6 – CCL 5 Microbes-Option Period 1**

Based on the results of Task 4, complete any remaining support materials as needed for CCL 5 Microbes. The contractor shall provide support with formatting, drafting and revising tables, designing diagrams, figures, providing editorial review, and ensuring that the support documents are 508 compliant.

Upon written technical direction from the EPA TOCOR, the contractor shall edit support documents based on any changes made between the Draft CCL 5 and Final CCL 5 based on public, SAB, workgroup or management feedback and comments.

Upon written technical direction from the EPA TOCOR, the contractor shall finalize and make 508 compliant the Final CCL 5 Technical Support Document and other support documents (CIS document, Response to Comments (RTC), response to the SAB report, etc.) for finalizing the CCL 5.

The contractor shall begin efforts for developing CCL 6 Microbes, including developing or updating Contaminant Information Sheets (CISs), evaluate data sources, conducting literature searches for additions to the microbial universe, and begin updating chapters of the CCL 5 microbial technical support document “Technical Support Document for the Draft Fifth Contaminant Candidate List (CCL 5)- Microbial Contaminants.

### Deliverables and schedule under Task 6

Task	Deliverable	Due Date
6a <b>Optional</b>	Revise and finalize remaining support documents and supporting files for Final CCL 5 (508 compliant) -Address any major issues stemming from CCL 5 public and SAB comments in the microbial TSD, e.g., adding weight- of evidence and implementation of revised Criterion 9 -Format all citations and references to be consistent in one style -Revise appendices e.g., add page numbers to the Appendix B-1 as was done for CCL 3	Per written technical direction by the TOCOR.
6b	Organize SAB and public comments about the CCL 5 Microbes process.	Per written technical direction by the TOCOR.
6c	Develop and/or update Contaminant Information Sheets (CISs) for an CCL 6 nominations.	Per written technical direction by the TOCOR.
6d	Evaluate data sources for CCL 6.	Per written technical direction by the TOCOR.
6e	Conduct literature searches for additions to CCL 6 Microbial universe	Per written technical direction by the TOCOR.
6f- <b>Optional</b>	Begin to develop the chapters of “Technical Support Document for the Draft Sixth Contaminant Candidate List (CCL 6)	Per written technical direction by the TOCOR.
6g- <b>Optional</b>	Evaluate recommendations from stakeholders regarding microbes from CCL 5 for CCL 6 and provide suggestions on addressing recommendations.	Per written technical direction by the TOCOR.

6h <b>Optional</b>	If necessary, re-evaluate the criteria and/or criterion the exclusionary screening criteria	Per written technical direction by the TOCOR.
6i <b>Optional</b>	Provide support for microbes with research/suggestions for CCL 5 SAB response report (internal document)	Per written technical direction by the TOCOR.

**Deliverables:** Revise and finalize remaining support document(s) and supporting files for Final CCL 5 and make 508 compliant, organize SAB and public comments about the CCL 5 Microbes. Develop any new and/or update any existing CISs for any CCL 6 nominations, evaluate data sources, evaluate recommendations from stakeholder during CCL 5, conduct literature searches for additions to CCL 6 Microbial universe, **Optional task include:** if necessary, re-evaluate the exclusionary screening criteria and/or certain criterion, develop chapters of Technical Support Document for the Draft Sixth Contaminant Candidate List (CCL 6), re-evaluate the exclusionary screening criteria, and provide support for microbes with research/suggestions for CCL 5 SAB response report

## **OPTION PERIOD 2**

### **Task 7-SYR4**

Continue support to finalize SYR4 tasks until the publication of SYR4's final FRN and technical support document "*Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulation.*"

#### **Deliverables and schedule under Task 7**

<b>Task</b>	<b>Deliverable</b>	<b>Due Date</b>
7a	Continuation of support finalizing SYR4's technical support document " <i>Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations</i> "	Per written technical direction by the TOCOR.
7b	Continue to provide support with an editorial and technical review of the draft of the FRN for Six-Year Review 4.	Per written technical direction by the TOCOR.

7c	Continue support with SYR4 docket (e.g., pulling and uploading references, etc.)	By February 2022, as needed, or as directed by written technical direction by the TOCOR.
7d	Continue support the development of SYR4 communication materials (e.g., comm one-pager, fact sheet, etc.)	Per written technical direction by the TOCOR.
7e	Support in workgroup meetings e.g., taking notes and capturing workgroup members feedback	Per written technical direction by the TOCOR.
7f	Continue support to prepare and upload SYR4 ICR files for data posting to EPA's SYR4 website and prepare associated metadata.	Per written technical direction by the TOCOR.

### Task 8-CCL 6 Microbes

Continue to support the development of CCL 6 Microbial Contaminants.

#### Deliverables and schedule under Task 8

Task	Deliverable	Due Date
8a	Continue to develop and/or update Contaminant Information Sheets (CISs) for an CCL 6 nominations.	Per written technical direction by the TOCOR.
8b	Conduct literature searches for additions to CCL 6 Microbial universe	Per written technical direction by the TOCOR.
8c	Continue to develop document: "Technical Support Document for the Draft Sixth Contaminant Candidate List (CCL 6) - Microbial Contaminants" for CCL 6 microbial contaminants.	To begin November 2022 and continue until the publication of CCL 6.

## VI. General Requirements of the Task Order and Schedule

Work conducted under this Task Order shall not duplicate work conducted under any other Task Order or Work Assignment under any other contract.

Confidential Business Information (CBI): For this Task Order, the contractor shall not be accessing any Confidential Business Information (CBI).

Identification as Contracting Staff: To avoid the perception that contractor personnel are EPA employees, the contractor personnel shall be clearly identified as independent contractors of EPA when participating in events with outside parties and prior to the start of any meeting. The contractor personnel are prohibited from acting as the Agency's official representative. When speaking with the public, the contractor shall refer all interpretations of policy to the TOCOR.

Limitation of Contractor Activities: The contractor shall submit drafts of all deliverables to the TOCOR for review prior to submission of the final product. These drafts will clearly specify the methods, procedures, considerations, assumptions, relevant citations, data sources and data that support any conclusions and recommendations. The contractor shall incorporate all TOCOR and EPA team member comments into all final deliverables, unless otherwise agreed upon by the TOCOR or where discrepancies exist. The contractor shall adhere to all applicable EPA management control procedures as implemented by the EPA Contracting Officer (CO), Project Officer (PO), and TOCOR.

Quick Response: Under this Performance Work Statement (PWS), the contractor may be required to provide information for use by EPA for quick responses and analyses of options, issues, and policy decisions. Quick responses are those which require completion in one to five working days.

Travel: Travel is not anticipated under this Performance Work Statement (PWS).

Deliverable Formatting: All memos, draft comments, summaries and responses, chapters, and presentations are to be provided in electronic form using Word and/or Excel/Access, Power Point, or, in special cases another software program agreed to by the TOCOR. Memos are to be written in a manner which will make them easy to conform into draft chapters for the Final Report. For deliverables that are in Word or pdf versions of Word documents, that are intended to be shared with management or the public, the contractor shall use decimal align in all tables containing columns of numbers of varying digits, whether decimal places are reported or not. All final materials, e.g., memos, chapters, etc. are to be compliant with Section 508 Amendment to the Rehabilitation Act of 1973.

## VII. BASE PERIOD DELIVERABLES

All deliverables shall be in accordance with the contract level PWS, Section F.

Task	Deliverables	Due
1	Progress and financial reports	Monthly
	Mid-monthly financial estimates	Mid-month every month until February 28, 2022

	Calls with EPA	Bi-weekly, weekly calls during periods of intense activity
2	Draft and Revised PQAPP	Within 2 weeks of TO award for the draft and within 2 weeks of receiving written comments from the TOCOR for the revised PQAPP.
3a	Provide suggestions to EPA Data Analysis Plan and Revised Data Analysis Plan (if needed)	Within 2 weeks of PQAPP approval unless TOCOR agrees to a later date and within 5 weeks of PQAPP unless TOCOR agrees to a later date
3b	Draft Data Analysis	Interim data analysis products delivery dates directed by TOCOR.
	Final Data Analysis	Within 1 month after comments are provided by the TOCOR on any revisions.
3c	Literature review on health effects and treatment	January 14, 2022 and January 24, 2022, respectively.
3d	Revise chapters Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations, Health Effects and Treatment and References	February 15, 2022 or as directed by written technical direction by the TOCOR-
3e	Additional contractor support may be necessary as discovered during data analysis effort. For example, errors may be detected in the database or updated information could be received from a state or other entity, requiring additional work in the data. Follow up with states about gaps in data as directed by the TOCOR. Adjust data for specified analysis as directed by the TOCOR.	As needed
3f	Revise and complete diagrams for the EPA SYR4 protocol.	January 31, 2022 unless TOCOR agrees to a later date.
3g	As directed by the TOCOR, evaluate different approaches and conduct analyses based on EPA small scale pilot analyses, for example to support analyses evaluating a Ground Water Rule treatment technique. Conduct other additional analyses not captured in the preliminary data analysis plan referenced in 3a, as directed by the TOCOR. Create	Within 3 weeks after clarification received from TOCOR or as directed by written technical direction by the TOCOR.

	interim data analyses, summary and synthesis products for SYR4 workgroup review.	
3h	Recreate Markov chain Monte Carlo modelling and Bayesian statistics (used for SYR3 data) and evaluate for SYR4 ICR data for occurrence of Total Coliform and/or E. Coli in undisinfected ground water systems (using year(s) determined by TOCOR) and provide write-up.	Within 3 weeks after clarification received from TOCOR, or as directed by written technical direction by the TOCOR.
4a	Support for response to comments received from FRN draft CCL 5	Within 1 month after comments are received
4b	Draft support documents and supporting files	Within two months of the TO award
	Final support documents and supporting files	Within 1 month after comments are provided by the TOCOR on revised draft support document.

#### **VIII. OPTION PERIOD 1 PERIOD DELIVERABLES**

<b>Task</b>	<b>Deliverable</b>	<b>Due Date</b>
5a	Draft 1: Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations.	Within 2 weeks after comments are provided by the TOCOR on revised draft support document or as directed by written technical direction by the TOCOR.
	Draft 2: Updated Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations prior to management briefings	Within 1 month after workgroup input is received or as directed by written technical direction by the TOCOR.
	Draft 3: Updated Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations after management briefings.	Within 1 month after management input has been received or as directed by written technical direction by the TOCOR.
	Create a 508 compliant version of the Six Year Review 4 Technical Support	Within 2 weeks after materials are finalized or as directed by written technical direction by the TOCOR.

	Document for Microbial Contaminant Regulations.	
5b	Revise analyses before and after workgroup and management briefings and meetings.  Finalize analyses and provide summary document with results	Within 2 weeks of management and/or workgroup feedback, or as directed by written technical direction by the TOCOR.  Within 2 weeks after receipt of final TOCOR feedback, or as directed by written technical direction by the TOCOR.
5c	Last minute changes or updates to QA Data Management document, protocol diagrams.	As needed and directed by the TOCOR or as directed by written technical direction by the TOCOR.
5d	Develop a draft and final Health Effects section for Fluoride in the SYR4 chemical support document (using EPA input on Health and occurrence).  Develop final document and compile references	Within 2 months or as directed by written technical direction by the TOCOR.  Within 2 weeks or as directed by written technical direction by the TOCOR.
5e	Create briefing material, presentations, tables, including one-time use tables (as needed)	Within a week or as directed by written technical direction by the TOCOR.
5f	Complete any analyses and/or items not completed in the base period from Tasks 3b, 3g, and 3h.	Within a week or as directed by written technical direction by the TOCOR.
5g	Conduct any additional literature reviews, if needed, for health effects and treatment.	Within a week or as directed by written technical direction by the TOCOR.
5h-(Optional)	As necessary, conduct Markov chain Monte Carlo modelling and Bayesian statistics (used for SYR3 data) and evaluate for SYR4 ICR data for occurrence of Total Coliform and/or E. Coli for all PWS or subsets for all years (2011-2019) as directed by the TOCOR, and provide tables, graphs, annotations with interpretations of modeling.	Per written technical direction by the TOCOR.

5i-(Optional)	<p>Prepare SYR4 ICR files for data posting to EPA's SYR4 website and prepare associated metadata. Making DBP SYR4 ICR files a priority.</p> <ul style="list-style-type: none"> <li>• Develop an excel spreadsheet of SYR4 ICR MDBP contaminants files to be posted on the SYR4 website.</li> <li>• summary information to be included in spreadsheet: record count before QA, record count after QA, the level of QA/QC associated with the data described, comments (e.g., what data is/isn't included, only includes SDWIS/states, non-SDWIS state data not in an acceptable format, limited effort to resolve flags, data provided from these states not captured in SQL DB).</li> </ul> <p>Then, as directed by TOCOR prepare files for data posting and with associated metadata.</p> <p>SYR4 DBP ICR files will be priority</p>	Per written technical direction by the TOCOR.
5j-(Optional)	<p>Provide an editorial and technical review of the draft of the FRN for Six-Year Review 4, using Track Changes. The editing will include the following considerations: spelling, grammar, internal consistency, cross-referencing within the document, consistent style for reference citations, accurate and complete references, complete proper sequencing of reference citations and footnotes, complete and accurate list of acronyms, and consistency in table headings.</p>	Per written technical direction by the TOCOR.
5k-Optional	<p>Resolving data analysis design issues, including understanding data elements.</p>	Per written technical direction by the TOCOR.
5l-Optional	<p>Support the development of SYR4 communication materials (e.g., comm one-pager, fact sheet, etc.)</p>	Per written technical direction by the TOCOR.

5m-Optional	Support with SYR4 docket (e.g. pulling and uploading references, etc.)	Per written technical direction by the TOCOR.
5n-Optional	Support in workgroup meetings e.g., taking notes and capturing workgroup members feedback	Per written technical direction by the TOCOR.
5o-(Optional)	DBP QA documentation and user guide for early release	Per written technical direction by the TOCOR.
5p-Optional	<del>Update</del> Format and update (as necessary) the Protocol Document and/or the protocol diagrams for SYR4.	Per written technical direction by the TOCOR.

#### CCL 5 Microbes

6a--(Optional)	Revise and finalize remaining support documents and supporting files for Final CCL 5 (508 compliant) -Address any major issues stemming from CCL 5 public and SAB comments in the microbial TSD, e.g., adding weight- of evidence and implementation of revised Criterion 9 -Format all citations and references to be consistent in one style -Revise appendices e.g., add page numbers to the Appendix B-1 as was done for CCL 3	Per written technical direction by the TOCOR.
6b	Organize SAB and public comments about the CCL 5 Microbes process.	Within 3 weeks of TOCOR direction or as directed by written technical direction by the TOCOR.
6c	Develop and/or update Contaminant Information Sheets (CISs) for an CCL 6 nominations.	To begin November 2022 or as directed by written technical direction by the TOCOR.
6d	Evaluate data sources for CCL 6.	Within 3 weeks of TOCOR direction or as directed by written technical direction by the TOCOR.

6e	Conduct literature searches for additions to CCL 6 Microbial universe	By November 1, 2022 or as directed by written technical direction by the TOCOR.
6f-(Optional)	Develop chapters of Technical Support Document for the Draft Sixth Contaminant Candidate List (CCL 6) for microbes	Per written technical direction by the TOCOR.
6g--(Optional)	Evaluate recommendations from stakeholders regarding microbes from CCL 5 for CCL 6 and provide suggestions on addressing recommendations.	Per written technical direction by the TOCOR.
6h-(Optional)	Re-evaluate the exclusionary screening criteria and/or certain criterion.	Per written technical direction by the TOCOR.
6i-(Optional)	Provide support for microbes with research/suggestions for CCL 5 SAB response report	Per written technical direction by the TOCOR.

#### IX. OPTION PERIOD 2 DELIVERABLES-

Task	Deliverable	Due Date
7a	Continuation of support finalizing SYR4's technical support document " <i>Six-Year Review 4 Technical Support Document for Microbial Contaminant Regulations</i> "	Within one week after comments are provided by the TOCOR on revised draft support document or as directed by written technical direction by TOCOR.
7b	Continue to provide support with an editorial and technical review of the draft of the FRN for Six-Year Review 4.	Within one week or as directed by written technical direction by TOCOR.
7c	Continue support with SYR4 docket (e.g., pulling and uploading references, etc.)	By February 2022, as needed, or as directed by written technical direction by the TOCOR.

7d	Continue support the development of SYR4 communication materials (e.g., comm one-pager, fact sheet, etc.)	As needed or as directed by written technical direction by the TOCOR.
7e	Support in workgroup meetings e.g., taking notes and capturing workgroup members feedback	As needed
7f	Continue support to prepare and upload SYR4 ICR files for data posting to EPA's SYR4 website and prepare associated metadata and user guide(s).	As directed by written technical direction by the TOCOR.
8a	Continue to develop and/or update Contaminant Information Sheets (CISs) for an CCL 6 nominations.	As needed or as directed by written technical direction by TOCOR.
8b	Conduct literature searches for additions to CCL 6 Microbial universe	As needed or as directed by written technical direction by TOCOR.
8c	Continue to develop the document: "Technical Support Document for the Draft Sixth Contaminant Candidate List (CCL 6) - Microbial Contaminants" for CCL 6 microbial contaminants.	To begin November 2022 and continue until the publication of CCL 6.

## **SECTION B - Supplies or Services/Prices**

### **B-1 Local Clauses EPA-B-32-103 LIMITATION OF GOVERNMENT'S OBLIGATION**

(a) Severable services may be incrementally funded. Non-severable services shall not be incrementally funded. Contract line item 0002 is severable and may be incrementally funded. For this item, the sum of \$215,000.00 of the total price is presently available for payment and allotted to this item.

(b) For items identified in paragraph (a) of this clause, the Contractor agrees to perform up to the point at which the total amount payable by the Government, including reimbursement in the event of termination of those items for the Government's convenience, approximates the total amount currently allotted for those items to the contract. The Contractor shall not continue work on those items beyond that point. Subject to the clause entitled "Termination for Convenience of the Government," the Government will not be obligated, under any circumstances, to reimburse the Contractor in excess of the amount payable by the Government in the event of the termination of applicable contract line items for convenience including costs, profit, and estimated termination costs for those line items.

(c) Notwithstanding the dates specified in the allotment schedule in paragraph (h) of this clause, the Contractor will notify the Contracting Officer, in writing, at least 10 days prior to the date when, in the Contractor's best judgment, the work will reach the point at which the total amount payable by the Government, including any cost for termination for convenience, will approximate 85 percent of the total amount currently allotted to the contract for performance of the applicable items. The notification will state (1) the estimated date when that point will be reached and (2) an estimate of additional funding, if any, needed to continue performance of the applicable line items up to the next scheduled date for the allotment of funds identified in paragraph (a) of this clause, or to a substitute date as determined by the Government pursuant to paragraph (d) of this clause. If, after such notification, additional funds are not allotted by the date identified in the Contractor's notification, or by an agreed substitute date, the Contracting Officer will terminate any item(s) for which additional funds have not been allotted, pursuant to the clause entitled "Termination for Convenience of the Government."

(d) The parties contemplate that, subject to the availability of appropriations, the Government may allot additional funds for continued performance of the contract line items identified in paragraph (a) of this clause and will determine the estimated period of contract performance which will be covered by the funds. If additional funds are allotted, the Contracting Officer will notify the Contractor in writing. The Contractor shall not resume performance of the contract line items identified in paragraph (a) until the written notice is received. The provisions of paragraphs (b) through (d) of this clause will apply in like manner to the additional allotted funds and to the new estimated period of contract performance. The contract will be modified accordingly.

(e) The Government may, at any time prior to termination, allot additional funds for the performance of the contract line items identified in paragraph (a) of this clause.

(f) The termination provisions of this clause do not limit the rights of the Government under the clause entitled "Default". The provisions of this clause are limited to the work and allotment of funds for the contract line items set forth in paragraph (a) of this clause. This clause no longer applies once the contract is fully funded.

(g) Nothing in this clause affects the right of the Government to otherwise terminate this contract pursuant to the contract clause entitled "Termination for Convenience of the Government".

(h) The parties contemplate that the Government may obligate funds to this contract in accordance with the following schedule:

RECAPITULATION:

**RECAPITULATION OF FUNDING TO DATE**  
**CONTRACT NO. 68HERC21D0006**  
**TASK ORDER NO. 68HERC21F0168 – Amendment 3**

**Option Period 1 Period of Performance – From 03/01/2022 through 02/28/2023**

<b>FUNDING ACTION</b>	<b>FUNDING</b>
<b>Total Line 0002 Amount</b> <b>(Increased by P00005)</b>	<b>\$264,133.00</b>
<b>Initial Funding</b> <b>(P00004)</b>	<b>\$130,000.00</b>
<b>Incremental Funding via PR-OW-22-00664</b> <b>(P00005)</b>	<b>\$85,000.00</b>
<b>Balance Unfunded</b>	<b>\$49,133.00</b>

## **SECTION F - Deliveries or Performance**

### **F-1 Local Clauses EPA-F-12-101 PERIOD OF PERFORMANCE**

The period of performance of Option Period 1 shall be from 03/01/2022 through 02/28/2023 inclusive of all required reports.

## **SECTION G - Contract Administration Data**

### **G-1 Local Clauses EPA-G-42-101 CONTRACT ADMINISTRATION REPRESENTATIVES**

Task Order-Level Contracting Officers Representatives (CORs)/Project Officers for this contract are as follows:

Nicole Tucker, 202-564-1946, email: tucker.nicole@epa.gov (TOCOR)

Jini Mohanty, 202-564-5269, email: mohanty.jini@epa.gov (Alternate TOCOR)

Contracting Officials responsible for administering this contract are as follows:

Keith Pfeffer, 513-487-2034, pfeffer.keith@epa.gov (Contracting Officer)

John Krauss, 513-487-2148, krauss.john@epa.gov (Contract Specialist)

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>				1. CONTRACT ID CODE		PAGE OF PAGES	
						1 2	
2. AMENDMENT/MODIFICATION NO.		3. EFFECTIVE DATE		4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO. (If applicable)	
P00006		See Block 16C		RFM-CAD-22-00098			
6. ISSUED BY		CODE		7. ADMINISTERED BY (If other than Item 6)		CODE	
CAD							
US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: W136 Cincinnati OH 45268-0001							
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)				(x)			
Cadmus Group LLC, The Attn: JING HOFFMANN 100 5TH AVENUE SUITE 100 WALTHAM MA 024518727							
				9A. AMENDMENT OF SOLICITATION NO.			
				9B. DATED (SEE ITEM 11)			
				x			
				10A. MODIFICATION OF CONTRACT/ORDER NO.			
				68HERC21D0006			
				68HERC21F0168			
				10B. DATED (SEE ITEM 13)			
				04/08/2021			
CODE WSEZME8NNBA8		FACILITY CODE					
<b>11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS</b>							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended. <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or electronic communication which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by letter or electronic communication, provided each letter or electronic communication makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required)							
See Schedule							
<b>13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.</b>							
CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.						
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).						
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:						
X	D. OTHER (Specify type of modification and authority) Clause B-1 EPA-B-32-103; Mutual Agreement Between Both Parties						
<b>E. IMPORTANT:</b> Contractor <input type="checkbox"/> is not <input checked="" type="checkbox"/> is required to sign this document and return <u>1</u> copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)							
UEI: WSEZME8NNBA8 TOCOR: NICOLE TUCKER InvoiceApprover: Nicole Tucker Alt Invoice App: Jini Mohanty The purpose of this Modification is to shift funds in the total Time-and-Materials amount of \$13,671.00 FROM Item 0001 (Base Period) TO Item 0002 (Option Period 1). As a result, \$13,671.00 is de-obligated from Item 0001, and \$13,671.00 is obligated to Item 0002, resulting in a net \$0.00 overall change to the Task Order.							
See below and the attached Funding Recap sheet.							
LIST OF CHANGES:							
Continued ...							
Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)			
				Keith Pfeffer			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA		16C. DATE SIGNED	
				 (Signature of Contracting Officer)		ELECTRONIC SIGNATURE 07/14/2022	
(Signature of person authorized to sign)							

<b>CONTINUATION SHEET</b>	REFERENCE NO. OF DOCUMENT BEING CONTINUED 68HERC21D0006/68HERC21F0168/P00006	PAGE	OF
		2	2

NAME OF OFFEROR OR CONTRACTOR  
Cadmus Group LLC, The

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>Total Amount for this Modification: \$0.00</p> <p>CHANGES FOR LINE ITEM NUMBER: 1</p> <p>Obligated Amount for this Modification: -\$13,671.00</p> <p>CHANGES FOR ACCOUNTING CODE: 21-22-B-40DB-000B53-2505-2140SRE014-001 Amount changed from \$50,137.00 to \$36,466.00</p> <p>CHANGES FOR LINE ITEM NUMBER: 2</p> <p>Obligated Amount for this Modification: \$13,671.00</p> <p>NEW ACCOUNTING CODE ADDED: Account code: 21-22-B-40DB-000B53-2505-2140SRE014-001 Beginning FiscalYear 21 Ending Fiscal Year 22 Fund (Appropriation) B Budget Organization 40DB Program (PRC) 000B53 Budget (BOC) 2505 Job # (Site/Project) Cost Organization DCN-LineID 2140SRE014-001 Quantity: 0 Amount: \$13,671.00</p> <p>Payment: RTP Finance Center US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts Durham NC 27711 Period of Performance: 04/08/2021 to 06/30/2023</p>				

## **SECTION B - Supplies or Services/Prices**

### **B-1 Local Clauses EPA-B-32-103 LIMITATION OF GOVERNMENT'S OBLIGATION**

Severable services may be incrementally funded. Non-severable services shall not be incrementally funded. Contract line item 0001 is severable and may be incrementally funded. For this item, the sum of \$155,346.00 of the total price is presently available for payment and allotted to this item. Contract line item 0002 is severable and may be incrementally funded. For this item, the sum of \$228,671.00 of the total price is presently available for payment and allotted to this item.

(b) For items identified in paragraph (a) of this clause, the Contractor agrees to perform up to the point at which the total amount payable by the Government, including reimbursement in the event of termination of those items for the Government's convenience, approximates the total amount currently allotted for those items to the contract. The Contractor shall not continue work on those items beyond that point. Subject to the clause entitled "Termination for Convenience of the Government," the Government will not be obligated, under any circumstances, to reimburse the Contractor in excess of the amount payable by the Government in the event of the termination of applicable contract line items for convenience including costs, profit, and estimated termination costs for those line items.

(c) Notwithstanding the dates specified in the allotment schedule in paragraph (h) of this clause, the Contractor will notify the Contracting Officer, in writing, at least 10 days prior to the date when, in the Contractor's best judgment, the work will reach the point at which the total amount payable by the Government, including any cost for termination for convenience, will approximate 85 percent of the total amount currently allotted to the contract for performance of the applicable items. The notification will state (1) the estimated date when that point will be reached and (2) an estimate of additional funding, if any, needed to continue performance of the applicable line items up to the next scheduled date for the allotment of funds identified in paragraph (a) of this clause, or to a substitute date as determined by the Government pursuant to paragraph (d) of this clause. If, after such notification, additional funds are not allotted by the date identified in the Contractor's notification, or by an agreed substitute date, the Contracting Officer will terminate any item(s) for which additional funds have not been allotted, pursuant to the clause entitled "Termination for Convenience of the Government."

(d) The parties contemplate that, subject to the availability of appropriations, the Government may allot additional funds for continued performance of the contract line items identified in paragraph (a) of this clause and will determine the estimated period of contract performance which will be covered by the funds. If additional funds are allotted, the Contracting Officer will notify the Contractor in writing. The Contractor shall not resume performance of the contract line items identified in paragraph (a) until the written notice is received. The provisions of paragraphs (b) through (d) of this clause will apply in like manner to the additional allotted funds and to the new estimated period of contract performance. The contract will be modified accordingly.

(e) The Government may, at any time prior to termination, allot additional funds for the performance of the contract line items identified in paragraph (a) of this clause.

(f) The termination provisions of this clause do not limit the rights of the Government under the clause entitled "Default". The provisions of this clause are limited to the work and allotment of funds for the contract line items set forth in paragraph (a) of this clause. This clause no longer applies once the contract is fully funded.

(g) Nothing in this clause affects the right of the Government to otherwise terminate this contract pursuant to the contract clause entitled "Termination for Convenience of the Government".

(h) The parties contemplate that the Government may obligate funds to this contract in accordance with the following schedule:

RECAPITULATION:

**RECAPITULATION OF FUNDING TO DATE**  
**CONTRACT NO. 68HERC21D0006**  
**TASK ORDER NO. 68HERC21F0168**

**Base Period of Performance – 04/08/2021 through 02/28/2022**

**Option Period 1 Period of Performance – From 03/01/2022 through 02/28/2023**

**BASE PERIOD**

<b>FUNDING ACTION</b>	<b>FUNDING</b>
<b>Total Line 0001 Amount</b>	<b>\$169,017.00</b>
Initial Funding	\$100,000.00
Incremental Funding (P00001)	\$50,137.00
Incremental Funding (P00003)	\$18,880.00
Line Item 0001 T&M Ceiling Value Decrease -\$13,671.00 (P00004)	
<b>Revised Line Item 0001 Total (P00004)</b>	<b>\$155,346</b>
Funds shift Base to Option Year 1	-\$13,671.00
<b>Balance Unfunded</b>	<b>-\$0-</b>

**OPTION PERIOD 1**

<b>FUNDING ACTION</b>	<b>FUNDING</b>
<b>Total Line 0002 Amount (Increased by P00005)</b>	<b>\$264,133.00</b>
Initial Funding (P00004)	\$130,000.00
Incremental Funding via PR-OW-22-00664 (P00005)	\$85,000.00
Funds shift Base to OY1 (P00006)	\$13,671.00
<b>Balance Unfunded</b>	<b>\$35,462.00</b>

## **SECTION F - Deliveries or Performance**

### **F-1 Local Clauses EPA-F-12-101 PERIOD OF PERFORMANCE**

The period of performance of the Base Period shall be from 04/08/2021 through 02/28/2022 inclusive of all required reports.

The period of performance of Option Period 1 shall be from 03/01/2022 through 02/28/2023 inclusive of all required reports.

## **SECTION G - Contract Administration Data**

### **G-1 Local Clauses EPA-G-42-101 CONTRACT ADMINISTRATION REPRESENTATIVES**

Task Order-Level Contracting Officers Representatives (CORs)/Project Officers for this contract are as follows:

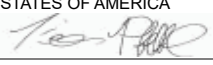
Nicole Tucker, 202-564-1946, email: tucker.nicole@epa.gov (TOCOR)

Jini Mohanty, 202-564-5269, email: mohanty.jini@epa.gov (Alternate TOCOR)

Contracting Officials responsible for administering this contract are as follows:

Keith Pfeffer, 513-487-2034, pfeffer.keith@epa.gov (Contracting Officer)

John Krauss, 513-487-2148, krauss.john@epa.gov (Contract Specialist)

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>				1. CONTRACT ID CODE		PAGE OF PAGES	
						1      2	
2. AMENDMENT/MODIFICATION NO.		3. EFFECTIVE DATE		4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO. (If applicable)	
P00007		See Block 16C		PR-OW-22-01163			
6. ISSUED BY		CODE		7. ADMINISTERED BY (If other than Item 6)		CODE	
CAD							
US Environmental Protection Agency							
26 West Martin Luther King Drive							
Mail Code: W136							
Cincinnati OH 45268-0001							
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)				(x)			
Cadmus Group LLC, The				9A. AMENDMENT OF SOLICITATION NO.			
Attn: JING HOFFMANN							
100 5TH AVENUE				9B. DATED (SEE ITEM 11)			
SUITE 100							
WALTHAM MA 024518727				x			
				10A. MODIFICATION OF CONTRACT/ORDER NO.			
				68HERC21D0006			
				68HERC21F0168			
				10B. DATED (SEE ITEM 13)			
				04/08/2021			
CODE WSEZME8NNBA8		FACILITY CODE					
<b>11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS</b>							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended. <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or electronic communication which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by letter or electronic communication, provided each letter or electronic communication makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required)				Net Increase:		\$35,462.00	
See Schedule							
<b>13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.</b>							
CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.						
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).						
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:						
X	D. OTHER (Specify type of modification and authority) B-1 Local Clauses EPA-B-32-103 LIMITATION OF GOVERNMENT'S OBLIGATION						
<b>E. IMPORTANT:</b> Contractor <input checked="" type="checkbox"/> is not <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)							
UEI: WSEZME8NNBA8							
TOCOR: NICOLE TUCKER InvoiceApprover: Nicole Tucker Alt Invoice App: Jini Mohanty							
The purpose of this modification is to add incremental funding in the total Time-and-Materials amount of \$35,462.00 to Line Item 0002 (Option Period 1).  See attached Funding Recap sheet.							
LIST OF CHANGES:							
Obligated Amount for this Modification: \$35,462.00							
Continued ...							
Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)			
				Keith Pfeffer			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA		16C. DATE SIGNED	
				 (Signature of Contracting Officer)		ELECTRONIC SIGNATURE 09/29/2022	
(Signature of person authorized to sign)							

<b>CONTINUATION SHEET</b>	REFERENCE NO. OF DOCUMENT BEING CONTINUED 68HERC21D0006/68HERC21F0168/P00007	PAGE	OF
		2	2

NAME OF OFFEROR OR CONTRACTOR

Cadmus Group LLC, The

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>CHANGES FOR LINE ITEM NUMBER: 2</p> <p>Obligated Amount for this Modification: \$35,462.00</p> <p>Incremental Funded Amount changed from \$228,671.00 to \$264,133.00</p> <p>NEW ACCOUNTING CODE ADDED:</p> <p>Account code: 22-23-B-40DB-000B53-2505-2240SRE067-001</p> <p>Beginning FiscalYear 22</p> <p>Ending Fiscal Year 23</p> <p>Fund (Appropriation) B</p> <p>Budget Organization 40DB</p> <p>Program (PRC) 000B53</p> <p>Budget (BOC) 2505</p> <p>Job # (Site/Project)</p> <p>Cost Organization</p> <p>DCN-LineID 2240SRE067-001</p> <p>Quantity: 0</p> <p>Amount: \$35,462.00</p> <p>Payment:</p> <p>RTP Finance Center</p> <p>US Environmental Protection Agency</p> <p>RTP-Finance Center (AA216-01)</p> <p>109 TW Alexander Drive</p> <p><a href="http://www2.epa.gov/financial/contracts">www2.epa.gov/financial/contracts</a></p> <p>Durham NC 27711</p> <p>Period of Performance: 04/08/2021 to 06/30/2023</p>				

## **SECTION B - Supplies or Services/Prices**

### **B-1 Local Clauses EPA-B-32-103 LIMITATION OF GOVERNMENT'S OBLIGATION**

Severable services may be incrementally funded. Non-severable services shall not be incrementally funded. Contract line item 0001 is severable and may be incrementally funded. For this item, the sum of \$155,346.00 of the total price is presently available for payment and allotted to this item. Contract line item 0002 is severable and may be incrementally funded. For this item, the sum of \$264,133.00 of the total price is presently available for payment and allotted to this item.

(b) For items identified in paragraph (a) of this clause, the Contractor agrees to perform up to the point at which the total amount payable by the Government, including reimbursement in the event of termination of those items for the Government's convenience, approximates the total amount currently allotted for those items to the contract. The Contractor shall not continue work on those items beyond that point. Subject to the clause entitled "Termination for Convenience of the Government," the Government will not be obligated, under any circumstances, to reimburse the Contractor in excess of the amount payable by the Government in the event of the termination of applicable contract line items for convenience including costs, profit, and estimated termination costs for those line items.

(c) Notwithstanding the dates specified in the allotment schedule in paragraph (h) of this clause, the Contractor will notify the Contracting Officer, in writing, at least 10 days prior to the date when, in the Contractor's best judgment, the work will reach the point at which the total amount payable by the Government, including any cost for termination for convenience, will approximate 85 percent of the total amount currently allotted to the contract for performance of the applicable items. The notification will state (1) the estimated date when that point will be reached and (2) an estimate of additional funding, if any, needed to continue performance of the applicable line items up to the next scheduled date for the allotment of funds identified in paragraph (a) of this clause, or to a substitute date as determined by the Government pursuant to paragraph (d) of this clause. If, after such notification, additional funds are not allotted by the date identified in the Contractor's notification, or by an agreed substitute date, the Contracting Officer will terminate any item(s) for which additional funds have not been allotted, pursuant to the clause entitled "Termination for Convenience of the Government."

(d) The parties contemplate that, subject to the availability of appropriations, the Government may allot additional funds for continued performance of the contract line items identified in paragraph (a) of this clause and will determine the estimated period of contract performance which will be covered by the funds. If additional funds are allotted, the Contracting Officer will notify the Contractor in writing. The Contractor shall not resume performance of the contract line items identified in paragraph (a) until the written notice is received. The provisions of paragraphs (b) through (d) of this clause will apply in like manner to the additional allotted funds and to the new estimated period of contract performance. The contract will be modified accordingly.

(e) The Government may, at any time prior to termination, allot additional funds for the performance of the contract line items identified in paragraph (a) of this clause.

(f) The termination provisions of this clause do not limit the rights of the Government under the clause entitled "Default". The provisions of this clause are limited to the work and allotment of funds for the contract line items set forth in paragraph (a) of this clause. This clause no longer applies once the contract is fully funded.

(g) Nothing in this clause affects the right of the Government to otherwise terminate this contract pursuant to the contract clause entitled "Termination for Convenience of the Government".

(h) The parties contemplate that the Government may obligate funds to this contract in accordance with the following schedule:

RECAPITULATION:

**RECAPITULATION OF FUNDING TO DATE**  
**CONTRACT NO. 68HERC21D0006**  
**TASK ORDER NO. 68HERC21F0168**

**Base Period of Performance – 04/08/2021 through 02/28/2022**

**Option Period 1 Period of Performance – From 03/01/2022 through 02/28/2023**

**BASE PERIOD**

<b>FUNDING ACTION</b>	<b>FUNDING</b>
<b>Total Line 0001 Amount</b>	<b>\$169,017.00</b>
Initial Funding	\$100,000.00
Incremental Funding (P00001)	\$50,137.00
Incremental Funding (P00003)	\$18,880.00
Line Item 0001 T&M Ceiling Value Decrease -\$13,671.00 (P00004)	
<b>Revised Line Item 0001 Total (P00004)</b>	<b>\$155,346</b>
Funds shift Base to Option Year 1	-\$13,671.00
<b>Balance Unfunded</b>	<b>-\$0-</b>

**OPTION PERIOD 1**

<b>FUNDING ACTION</b>	<b>FUNDING</b>
<b>Total Line 0002 Amount (Increased by P00005)</b>	<b>\$264,133.00</b>
Initial Funding (P00004)	\$130,000.00
Incremental Funding via PR-OW-22-00664 (P00005)	\$85,000.00
Funds shift Base to OY1 (P00006)	\$13,671.00
Incremental Funding via PR-OW-22-01163 (P00007)	\$35,462.00
<b>Balance Unfunded</b>	<b>\$0</b>

## **SECTION F - Deliveries or Performance**

### **F-1 Local Clauses EPA-F-12-101 PERIOD OF PERFORMANCE**

The period of performance of the Base Period shall be from 04/08/2021 through 02/28/2022 inclusive of all required reports.

The period of performance of Option Period 1 shall be from 03/01/2022 through 02/28/2023 inclusive of all required reports.

## **SECTION G - Contract Administration Data**

### **G-1 Local Clauses EPA-G-42-101 CONTRACT ADMINISTRATION REPRESENTATIVES**

Task Order-Level Contracting Officers Representatives (CORs)/Project Officers for this contract are as follows:

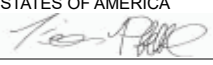
Nicole Tucker, 202-564-1946, email: tucker.nicole@epa.gov (TOCOR)

Jini Mohanty, 202-564-5269, email: mohanty.jini@epa.gov (Alternate TOCOR)

Contracting Officials responsible for administering this contract are as follows:

Keith Pfeffer, 513-487-2034, pfeffer.keith@epa.gov (Contracting Officer)

John Krauss, 513-487-2148, krauss.john@epa.gov (Contract Specialist)

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>				1. CONTRACT ID CODE		PAGE OF PAGES	
						1      2	
2. AMENDMENT/MODIFICATION NO.		3. EFFECTIVE DATE		4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO. (If applicable)	
P00008		See Block 16C		PR-OW-23-00120			
6. ISSUED BY		CODE		7. ADMINISTERED BY (If other than Item 6)		CODE	
CAD							
US Environmental Protection Agency							
26 West Martin Luther King Drive							
Mail Code: W136							
Cincinnati OH 45268-0001							
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)				(x)			
Cadmus Group LLC, The				9A. AMENDMENT OF SOLICITATION NO.			
Attn: JING HOFFMANN							
100 5TH AVENUE				9B. DATED (SEE ITEM 11)			
SUITE 100							
WALTHAM MA 024518727				x			
				10A. MODIFICATION OF CONTRACT/ORDER NO.			
				68HERC21D0006			
				68HERC21F0168			
				10B. DATED (SEE ITEM 13)			
				04/08/2021			
CODE WSEZME8NNBA8		FACILITY CODE					
<b>11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS</b>							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended. <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or electronic communication which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by letter or electronic communication, provided each letter or electronic communication makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required)				Net Increase:		\$105,947.00	
See Schedule							
<b>13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.</b>							
CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.						
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).						
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:						
X	D. OTHER (Specify type of modification and authority) Unilateral - Term Option Exercise / EPA-B-32-103 Limitation of Government's Obligation						
<b>E. IMPORTANT:</b> Contractor <input checked="" type="checkbox"/> is not <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)							
UEI: WSEZME8NNBA8							
TOCOR: NICOLE TUCKER Max Expire Date: 06/30/2023 Invoice Approver: Nicole Tucker Alt Invoice							
App: Jini Mohanty							
The purposes of this task order modification are to:							
1) Exercise Option Period 2 (Item 0003), which is a severable services line item with a time-and-materials ceiling value of \$105,947.00; and							
2) Add \$105,947.00 of incremental funding to Item 0003, which fully funds this Item.							
Continued ...							
Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)			
				Keith Pfeffer			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA		16C. DATE SIGNED	
				 (Signature of Contracting Officer)		ELECTRONIC SIGNATURE 01/26/2023	
(Signature of person authorized to sign)							

<b>CONTINUATION SHEET</b>	REFERENCE NO. OF DOCUMENT BEING CONTINUED	PAGE	OF
	68HERC21D0006/68HERC21F0168/P00008	2	2

NAME OF OFFEROR OR CONTRACTOR  
Cadmus Group LLC, The

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>See attached Funding Recap sheet.</p> <p>LIST OF CHANGES:</p> <p>Obligated Amount for this Modification: \$105,947.00</p> <p>CHANGES FOR LINE ITEM NUMBER: 3 Obligated Amount for this Modification: \$105,947.00 Incremental Funded Amount changed from \$0.00 to \$105,947.00 Exercised option</p> <p>NEW ACCOUNTING CODE ADDED: Account code: 23-24-B-40DR1-000B53-2505-2340SRE008-001 Beginning FiscalYear 23 Ending Fiscal Year 24 Fund (Appropriation) B Budget Organization 40DR1 Program (PRC) 000B53 Budget (BOC) 2505 Job # (Site/Project) Cost Organization DCN-LineID 2340SRE008-001 Quantity: 0 Amount: \$105,947.00</p> <p>Payment: RTP Finance Center US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts Durham NC 27711 Period of Performance: 03/01/2023 to 06/30/2023</p>				

## **SECTION B - Supplies or Services/Prices**

### **B-1 Local Clauses EPA-B-32-103 LIMITATION OF GOVERNMENT'S OBLIGATION**

(a) Severable services may be incrementally funded. Non-severable services shall not be incrementally funded. Contract line item 0003 is severable and may be incrementally funded. For this item, the sum of **\$105,947.00** of the total price is presently available for payment and allotted to this item.

(b) For items identified in paragraph (a) of this clause, the Contractor agrees to perform up to the point at which the total amount payable by the Government, including reimbursement in the event of termination of those items for the Government's convenience, approximates the total amount currently allotted for those items to the contract. The Contractor shall not continue work on those items beyond that point. Subject to the clause entitled "Termination for Convenience of the Government," the Government will not be obligated, under any circumstances, to reimburse the Contractor in excess of the amount payable by the Government in the event of the termination of applicable contract line items for convenience including costs, profit, and estimated termination costs for those line items.

(c) Notwithstanding the dates specified in the allotment schedule in paragraph (h) of this clause, the Contractor will notify the Contracting Officer, in writing, at least 10 days prior to the date when, in the Contractor's best judgment, the work will reach the point at which the total amount payable by the Government, including any cost for termination for convenience, will approximate 85 percent of the total amount currently allotted to the contract for performance of the applicable items. The notification will state (1) the estimated date when that point will be reached and (2) an estimate of additional funding, if any, needed to continue performance of the applicable line items up to the next scheduled date for the allotment of funds identified in paragraph (a) of this clause, or to a substitute date as determined by the Government pursuant to paragraph (d) of this clause. If, after such notification, additional funds are not allotted by the date identified in the Contractor's notification, or by an agreed substitute date, the Contracting Officer will terminate any item(s) for which additional funds have not been allotted, pursuant to the clause entitled "Termination for Convenience of the Government."

(d) The parties contemplate that, subject to the availability of appropriations, the Government may allot additional funds for continued performance of the contract line items identified in paragraph (a) of this clause and will determine the estimated period of contract performance which will be covered by the funds. If additional funds are allotted, the Contracting Officer will notify the Contractor in writing. The Contractor shall not resume performance of the contract line items identified in paragraph (a) until the written notice is received. The provisions of paragraphs (b) through (d) of this clause will apply in like manner to the additional allotted funds and to the new estimated period of contract performance. The contract will be modified accordingly.

(e) The Government may, at any time prior to termination, allot additional funds for the performance of the contract line items identified in paragraph (a) of this clause.

(f) The termination provisions of this clause do not limit the rights of the Government under the clause entitled "Default". The provisions of this clause are limited to the work and allotment of funds for the contract line items set forth in paragraph (a) of this clause. This clause no longer applies once the contract is fully funded.

(g) Nothing in this clause affects the right of the Government to otherwise terminate this contract pursuant to the contract clause entitled "Termination for Convenience of the Government".

(h) The parties contemplate that the Government may obligate funds to this contract in accordance with the following schedule:

**RECAPITULATION OF FUNDING TO DATE – LINE ITEM 0003**  
**CONTRACT NO. 68HERC21D0006**  
**TASK ORDER NO. 68HERC21F0168**

**Period of Performance - FROM 03/01/2023 through 06/30/2023**

<b>Line Item 0003 Amount</b>	<b>\$105,947.00</b>
Funding Action	
Incremental Funding (P00008)	\$105,947.00
<b>Unfunded amount</b>	<b>-\$0-</b>

**SECTION F - Deliveries or Performance**

F-1 Local Clauses EPA-F-12-101 PERIOD OF PERFORMANCE

Option Period 2 shall have a period of performance from 03/01/2023 through 06/30/2023, inclusive of all required reports.

**SECTION G - Contract Administration Data**

G-1 Local Clauses EPA-G-42-101 CONTRACT ADMINISTRATION REPRESENTATIVES

Task Order-Level Contracting Officers Representatives (CORs)/Project Officers for this contract are as follows:


Nicole Tucker 202-564-1946, tucker.nicole@epa.gov (TOCOR)

Jini Mohanty 202-564-5269, mohanty.jini@epa.gov (Alternate TOCOR)

Contracting Officials responsible for administering this contract are as follows:

Keith Pfeffer, 513-487-2034, pfeffer.keith@epa.gov (Contracting Officer)

John Krauss, 513-487-2148, krauss.john@epa.gov (Contract Specialist)

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>		1. CONTRACT ID CODE		PAGE OF PAGES 1 2	
2. AMENDMENT/MODIFICATION NO. P00009		3. EFFECTIVE DATE See Block 16C		5. PROJECT NO. (If applicable)	
6. ISSUED BY CODE CAD US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: W136 Cincinnati OH 45268-0001		7. ADMINISTERED BY (If other than Item 6) CODE			
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) Cadmus Group LLC, The Attn: JING HOFFMANN 100 5TH AVENUE SUITE 100 WALTHAM MA 024518727		<div style="display: flex; align-items: center;"> <div style="width: 20px; text-align: center;">(x)</div> <div>9A. AMENDMENT OF SOLICITATION NO.</div> </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; text-align: center;">x</div> <div>9B. DATED (SEE ITEM 11)</div> </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; text-align: center;">x</div> <div>10A. MODIFICATION OF CONTRACT/ORDER NO. 68HERC21D0006 68HERC21F0168</div> </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; text-align: center;">x</div> <div>10B. DATED (SEE ITEM 13) 04/08/2021</div> </div>			
CODE WSEZME8NNBA8 FACILITY CODE					
<b>11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS</b>					
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended. <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or electronic communication which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by letter or electronic communication, provided each letter or electronic communication makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.					
12. ACCOUNTING AND APPROPRIATION DATA (If required) See Schedule					
<b>13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.</b>					
CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.				
X	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).				
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:				
	D. OTHER (Specify type of modification and authority)				
<b>E. IMPORTANT:</b> Contractor <input checked="" type="checkbox"/> is not <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.					
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)					
UEI: WSEZME8NNBA8 TOCOR: NICOLE TUCKER Max Expire Date: 06/30/2023 Invoice Approver: Nicole Tucker Alt Invoice App: Jini Mohanty The purpose of this modification to synchronize the accounting data between the Agency's contract writing system (EAS) and its Financial System (COMPASS) in preparation for the Agency's full implementation of Invoice Processing Platform (IPP) conversion. The line of accounting internal to EAS associated with the funds allocated from the contract was incorrect (internally to EAS, the allocation was from funding line 1-2 and should have been from funding line 1-1). This modification makes the internal adjustment to the line of accounting in EAS. The Agency's Finance Office (RTP Finance Center) does not need to change anything relative to funding in its system. It simply needs to record receipt of Continued ... Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.					
15A. NAME AND TITLE OF SIGNER (Type or print)			16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)		
			David Plagge		
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA	
(Signature of person authorized to sign)				 ELECTRONIC SIGNATURE	
				16C. DATE SIGNED 02/01/2023	

NAME OF OFFEROR OR CONTRACTOR  
Cadmus Group LLC, The

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	this modification.  Period of Performance: 03/01/2023 to 06/30/2023				